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# Historic Emissions of Sulfur and Nitrogen Oxides in the United States from 1900 to 1980. Volume 2. Data

Pacific Environmental Services, Inc., Durham, NC

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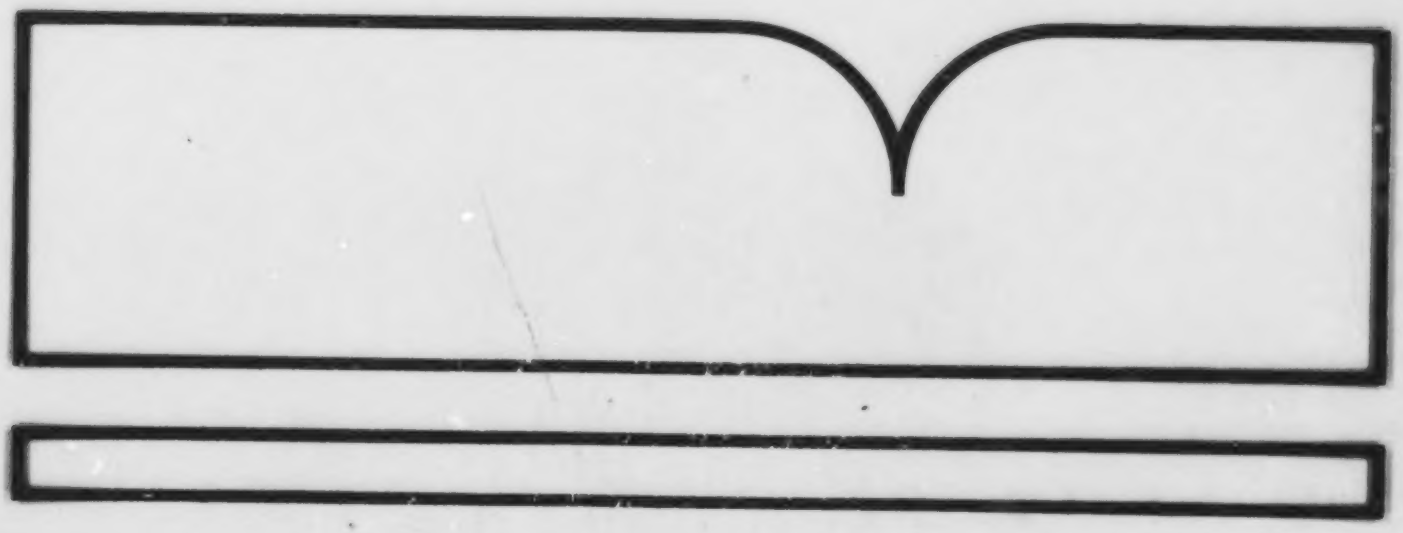

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# HISTORIC EMISSIONS OF SULFUR AND NITROGEN OXIDES IN THE UNITED STATES FROM 1900 TO 1980

## Volume II. Data

by

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16. ABSTRACT The report gives results of an estimate of historic emissions of sulfur dioxide (SO2) and nitrogen oxides (NOx) for Task Group B, Manmade Sources, of the National Acid Precipitation Assessment Program (NAPAP) for each state of the conterminous U.S. The emissions were estimated by individual source category on the state level from 1900 to 1980 for every fifth year and for 1978. The source categories included power plants, industrial boilers, industrial processes, commercial and residential heaters, natural gas pipelines, highway vehicles, off-highway diesel engines, and all other anthropogenic sources. These emissions were calculated from salient statistics indicative of fuel consumption or industrial output, estimations of average statewide fuel properties, and estimates of emission factors specific to each source category over time. The emission estimates were then aggregated to show the emission trends by state, region, and all states combined. Total state emissions for each year were then estimated using an interpolation procedure based on national annual fuel consumption.

17. KEY WORDS AND DOCUMENT ANALYSIS

| a. DESCRIPTORS | b. IDENTIFIERS/OPEN ENDED TERMS | c. COSATI Field/Group |
|---|---|---|
| Pollution | Pollution Control | 13B |
| Sulfur Dioxide | Stationary Sources | 07B |
| Nitrogen Oxides | Anthropogenesis | |
| Precipitation (Meteorology) | Acid Rain | 04B |
| Acidity | | 07D |

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NOTICE

This document has been reviewed in accordance with U.S. Environmental Protection Agency policy and approved for publication. Mention of trade names or commercial products does not constitute endorsement or recommendation for use.

# FOREWORD

This volume contains all salient data used to produce estimates of historic $SO_2$ and $NO_x$ emissions for each state. It displays these data for each state, all input data and the calculated emissions which are presented in a series of tables according to year and source category. This volume is preceded by Volume I which should be studied before using Volume II. Volume I contains a summary of the data and an explanation of the methodology used to estimate the historic emissions. Volume II presents the emission estimates according to state in alphabetical order from Alabama to Wyoming. Appendices A through D contain information on sulfur content of coal and oil and information on certain source categories not included in the individual state tables.

The data contained in this volume are available on computer tape. Copies of the tape may be made upon request by writing Requests and Information Section, National Air Data Branch, MD-14, U.S. Environmental Protection Agency, Research Triangle Park, North Carolina 27701.

## TABLES AND FIGURES

This volume is divided into six sections. Each section presents data for each of the contiguous 48 states and the District of Columbia on an individual basis. The tables and figures which present the data in each section are shown below.


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Figure 1. Overall $SO_2$ Trend 1900-1980, and by Source Category
Figure 2. Overall $SO_2$ Trend 1900-1980, and by Fuel Type
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Figure 4. Overall $NO_x$ Trend 1900-1980, and by Fuel Type

The states appear in each section in alphabetical order. Footnotes to the fuel consumption values are included at the end of Section 1.0. Supplementary information that supports the emissions estimates is presented in appendices after Section 6.0

Appendix A presents average sulfur content values derived for each state for coal and oil burned in the electric utilities, industrial, commercial-residential, railroads and coke plants source categories. Footnotes to the sulfur content values are included at the end of Appendix A.

Appendix B presents the $SO_2$ and $NO_x$ emission factors used in this study. It presents the national average emission factors used for most source categories and the state average factors used for highway vehicles, coke plants, cement plants and wildfires.

Appendix C presents the state emission estimates for copper, zinc and lead smelters and the underlying data bases. It presents the production of recoverable metals, uncontrolled emission estimates, quantity of $SO_2$ removed by sulfuric-acid production, and controlled emissions on the state level.

Appendix D presents the total area of each state that was burned by wildfires for each study year. These statistics are in support of the wildfires category.

## LIST OF ABBREVIATIONS

ABBREVIATIONS

| | | |
|---|---|---|
| bbl | -- | barrel (42 U.S. gallons) |
| Btu | -- | British thermal unit (0.252 Kilogram-calorie) |
| cu.ft. | -- | cubic feet (0.028317 cubic meters) |
| gal | -- | U.S. gallon (3.7853 liters) |
| lb | -- | pound (0.45359 kilogram) |
| mi | -- | mile (1.6093 kilometers) |
| NA | -- | not available |
| ton | -- | short ton (906.18 kilograms) |

# SECTION 1.0

# STATE FUEL CONSUMPTION

(NOTE: Footnotes to Fuel Consumption Data Located in Back of Section 1.0)

TABLE 1. FUEL CONSUMPTION 1900-1945 FOR THE STATE OF ALABAMA

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL(1000 TONS) | | | | | | | | | | |
| ELECTRIC UTILITIES | 83. | 138. | 189. | 252. | 303. | 356. | 424. | 398. | 780. | 1351. |
| INDUSTRIAL BOILERS | 981. | 1404. | 1821. | 2262. | 2392. | 2473. | 1964. | 1446. | 1451. | 1467. |
| COMMERCIAL-RESIDENTIAL | 306. | 457. | 624. | 856. | 913. | 1041. | 1086. | 829. | 810. | 1056. |
| ANTHRACITE COAL (1000 TONS) | | | | | | | | | | |
| ALL USES | 5. | 7. | 8. | 8. | 8. | 6. | NA | NA | NA | NA |
| RESIDUAL OIL (1000 BBL) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | 20. | 16. | 14. | 34. | 16. |
| INDUSTRIAL | NA | NA | NA | NA | NA | 120. | 115. | 114. | 171. | 727. |
| COMMERCIAL | NA | NA | NA | NA | NA | 25. | 42. | 67. | 114. | 170. |
| DISTILLATE OIL (1000 BBL) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | 1. | 1. | 1. | 5. | 54. |
| INDUSTRIAL | NA | NA | NA | NA | NA | 45. | 43. | 43. | 64. | 187. |
| COMMERCIAL -RESIDENTIAL | NA | NA | NA | NA | NA | 46. | 78. | 125. | 244. | 621. |
| NATURAL GAS (10E6 CU. FT.) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | NA | NA | 624. | 913. | 6557. |
| INDUSTRIAL | NA | NA | NA | 184. | 0. | 0. | 732. | 12888. | 19872. | 38714. |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | NA | 0. | 0. | 0. | 423. | 1425. | 2656. | 4703. |
| WOOD (1000 TONS) | | | | | | | | | | |
| ALL USES | 5225. | 4964. | 4755. | 4546. | 4337. | 4128. | 3919. | 3762. | 3658. | 3396. |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE(1000 GAL) | NA | NA | NA | NA | NA | 101986. | 164428. | 166013. | 250234. | 274086. |
| DIESEL (1000 GAL.) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL(1000 TONS) | 888. | 1322. | 1698. | 1943. | 2247. | 1972. | 1789. | 1474. | 1699. | 2569. |
| RAILROADS-OIL(1000 BBL) | NA | NA | NA | NA | NA | 132. | 124. | 102. | 119. | 390. |
| COKE PL (1000 TONS COAL) | 3202. | 4054. | 5527. | 5754. | 6809. | 6088. | 5734. | 3815. | 5607. | 5938. |
| VES FUEL OIL (1000 BBL) | NA | NA | NA | NA | NA | 1513. | 1796. | 1423. | 1195. | 2153. |
| CEMENT PL (1000 TONS) | 0. | NA | NA | NA | NA | 1182. | 906. | 469. | 962. | 1042. |

TABLE 2. FUEL CONSUMPTION 1950-1980 FOR THE STATE OF ALABAMA

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL(1000 TONS) | | | | | | | | |
| ELECTRIC UTILITIES | 1006. | 4917. | 7264. | 12572. | 15759. | 19246. | 13782. | 18383. |
| INDUSTRIAL BOILERS | 923. | 863. | 289. | 2293. | 2265. | 2163. | 3130. | 2375. |
| COMMERCIAL-RESIDENTIAL | 756. | 476. | 274. | 99. | 150. | 13. | 46. | 209. |
| ANTHRACITE COAL (1000 TONS) | | | | | | | | |
| ALL USES | 0. | 0. | 24. | 38. | 0. | 0. | 0. | 47. |
| RESIDUAL OIL (1000 BBL) | | | | | | | | |
| ELECTRIC UTILITIES | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| INDUSTRIAL | 998. | 1285. | 1758. | 726. | 1431. | 2708. | 5802. | 3774. |
| COMMERCIAL | 61. | 113. | 142. | 80. | 215. | 3393. | 3572. | 589. |
| DISTILLATE OIL (1000 BBL) | | | | | | | | |
| ELECTRIC UTILITIES | 7. | 55. | 0. | 0. | 30. | 651. | 1141. | 128. |
| INDUSTRIAL | 935. | 824. | 1380. | 684. | 1080. | 1358. | 1763. | 1522. |
| COMMERCIAL-RESIDENTIAL | 989. | 1724. | 1016. | 1083. | 1651. | 3656. | 4653. | 1127. |
| NATURAL GAS (10E6 CU. FT.) | | | | | | | | |
| ELECTRIC UTILITIES | 16396. | 17414. | 9378. | 4706. | 15444. | 5994. | 7015. | 1382. |
| INDUSTRIAL | 74265. | 108659. | 110711. | 135341. | 170937. | 153540. | 129427. | 160552. |
| PIPELINES | 2373. | 6326. | 7600. | 11998. | 20083. | 18801. | 14210. | 26447. |
| COMMERCIAL-RESIDENTIAL | 15828. | 36340. | 58322. | 80048. | 92033. | 85753. | 86606. | 80859 |
| WOOD (1000 TONS) | | | | | | | | |
| ELECTRIC UTILITIES | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| INDUSTRIAL | 1074. | 1274. | 1372. | 1864. | 2435. | 2722. | 3186. | 3218. |
| COMMERCIAL | 39. | 30. | 24. | 17. | 11. | 12. | 13. | 13. |
| RESIDENTIAL | 2022. | 1558. | 1260. | 889. | 599. | 616. | 671. | 705. |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE (1000 GAL.) | 526142. | 773575. | 1004290. | 1248551. | NA | NA | NA | NA |
| DIESEL (1000 GAL.) | 10584. | 13062. | 25536. | 49728. | 120540. | 182994. | 263970. | 317940. |
| RURAL VMT (10E6 MILES) | NA | NA | NA | NA | 10229. | 12328. | 16081. | 15523. |
| URBAN VMT (10E6 MILES) | NA | NA | NA | NA | 7342. | 12510. | 13826. | 13504. |
| OTHER | | | | | | | | |
| RAILROADS-COAL(1000 TONS) | 1411. | 439. | 89. | 0. | 0. | 0. | 0. | 0. |
| -OIL(1000 BBL) | 640. | 1163. | 1459. | 1597. | 2009. | 2723. | 2841. | 2955. |
| COKE PLANTS (1000 TONS COAL) | 8221. | 8540. | 6719. | 7219. | 8533. | 6783. | 4656. | 5013. |
| VESSELS-DISTILLATE(1000 BBL) | 51. | 78. | 64. | 14. | 91. | 194. | 319. | 93. |
| -RESIDUAL(1000 BBL) | 255. | 597. | 522. | 289. | 385. | 1653. | 1704. | 732. |
| OFF HIGHWAY DIESEL (1000 BBL) | 290. | 282. | 1001. | 614. | 1368. | 1246. | 2805. | 676. |
| CEMENT PLANT (1000 TONS) | 1950. | 2286. | 2244. | 2649. | 2405. | 1995. | 2955. | 2520. |

TABLE 1. FUEL CONSUMPTION 1900-1945 FOR THE STATE OF ARIZONA

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL(1000 TONS) | | | | | | | | | | |
| ELECTRIC UTILITIES | 1. | 1. | 2. | 2. | 2. | 1. | 0. | 0. | 0. | 1. |
| INDUSTRIAL BOILERS | 9. | 16. | 24. | 34. | 92. | 191. | 187. | 143. | 152. | 162. |
| COMMERCIAL-RESIDENTIAL | 19. | 34. | 53. | 82. | 91. | 104. | 106. | 78. | 74. | 92. |
| ANTHRACITE COAL (1000 TONS) | | | | | | | | | | |
| ALL USES | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| RESIDUAL OIL (1000 BBL) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | 535. | 425. | 376. | 464. | 147. |
| INDUSTRIAL | NA | NA | NA | NA | NA | 1451. | 1387. | 1373. | 759. | 904. |
| COMMERCIAL | NA | NA | NA | NA | NA | 7. | 11. | 18. | 38. | NA |
| DISTILLATE OIL (1000 BBL) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | 142. | 113. | 100. | 72. | 37. |
| INDUSTRIAL | NA | NA | NA | NA | NA | 33. | 31. | 31. | 31. | 72. |
| COMMERCIAL -RESIDENTIAL | NA | NA | NA | NA | NA | 52. | 88. | 142. | 131. | 261. |
| NATURAL GAS (10E6 CU. FT.) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | 0. | 0. | 0. | 1993. | 2915. | 2091. |
| INDUSTRIAL | NA | NA | 0. | 0. | 0. | 0. | 0. | 8485. | 13083. | 17352. |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | 0. | 0. | 0. | 0. | 0. | 1075. | 2004. | 5136. |
| WOOD (1000 TONS) | | | | | | | | | | |
| ALL USES | 513. | 488. | 467. | 447. | 426. | 406. | 385. | 370. | 359. | 334. |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE(1000 GAL) | NA | NA | NA | NA | NA | 28864. | 67616. | 68714. | 99998. | 108820. |
| DIESEL (1000 GAL.) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL(1000 TONS) | 211. | 378. | 566. | 736. | 842. | 678. | 565. | 428. | 449. | 612. |
| RAILROADS-OIL(1000 BBL) | NA | NA | NA | NA | NA | 2372. | 2230. | 1828. | 1982. | 1749. |
| COKE PL (1000 TONS COAL) | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| VES FUEL OIL (1000 BBL) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CEMENT PL (1000 TONS) | 0. | NA | NA | 0. | 0. | 0. | 0. | 0. | 0. | 0. |

TABLE 2. FUEL CONSUMPTION 1950-1980 FOR THE STATE OF ARIZONA

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL(1000 TONS) | | | | | | | | |
| ELECTRIC UTILITIES | 0. | 0. | 0. | 333. | 484. | 3873. | 7709. | 12510. |
| INDUSTRIAL BOILERS | 89. | 84. | 73. | 76. | 43. | 112. | 433. | 655. |
| COMMERCIAL-RESIDENTIAL | 28. | 18. | 14. | 40. | 0. | 0. | 0. | 0. |
| ANTHRACITE COAL (1000 TONS) | | | | | | | | |
| ALL USES | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| RESIDUAL OIL (1000 BBL) | | | | | | | | |
| ELECTRIC UTILITIES | 6. | 37. | 13. | 4. | 8. | 4991. | 2828. | 890. |
| INDUSTRIAL | 134. | 13. | 58. | 1. | 36. | 142. | 553. | 137. |
| COMMERCIAL | 10. | 1. | 5. | 26. | 14. | 0. | 0. | 10. |
| DISTILLATE OIL (1000 BBL) | | | | | | | | |
| ELECTRIC UTILITIES | 25. | 15. | 1. | 2. | 4. | 3122. | 962. | 1003. |
| INDUSTRIAL | 113. | 199. | 534. | 672. | 1401. | 2739. | 3584. | 1617. |
| COMMERCIAL-RESIDENTIAL | 378. | 520. | 229. | 252. | 226. | 872. | 1657. | 296. |
| NATURAL GAS (10E6 CU. FT.) | | | | | | | | |
| ELECTRIC UTILITIES | 13807. | 23843. | 53246. | 37162. | 58878. | 17693. | 54379. | 49699. |
| INDUSTRIAL | 38553. | 50780. | 14474. | 56560. | 57732. | 50868. | 45791. | 37807. |
| PIPELINES | 3050. | 8542. | 15910. | 18002. | 23952. | 17092. | 15175. | 21339. |
| COMMERCIAL-RESIDENTIAL | 11816. | 19055. | 52694. | 44420. | 52384. | 70569. | 59696. | 57005. |
| WOOD (1000 TONS) | | | | | | | | |
| ELECTRIC UTILITIES | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| INDUSTRIAL | 45. | 54. | 58. | 62. | 74. | 113. | 175. | 187. |
| COMMERCIAL | 5. | 4. | 3. | 3. | 3. | 4. | 4. | 5. |
| RESIDENTIAL | 258. | 199. | 161. | 150. | 175. | 198. | 235. | 269. |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE (1000 GAL.) | 221925. | 348590. | 522374. | 667079. | NA | NA | NA | 0. |
| DIESEL (1000 GAL.) | 13524. | 8904. | 18690. | 23940. | 111846. | 138306. | 193788. | 215754. |
| RURAL VMT (10E6 MILES) | NA | NA | NA | NA | 6557. | 7521. | 9054. | 9989. |
| URBAN VMT (10E6 MILES) | NA | NA | NA | NA | 5562. | 8462. | 10223. | 8827. |
| OTHER | | | | | | | | |
| RAILROADS-COAL(1000 TONS) | 333. | 108. | 228. | 11. | 5. | 0. | 0. | 0. |
| -OIL(1000 BBL) | 1343. | 66. | 956. | 1164. | 1033. | 1059. | 1548. | 1298. |
| COKE PLANTS (1000 TONS COAL) | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| VESSELS-DISTILLATE(1000 BBL) | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| -RESIDUAL(1000 BBL) | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| OFF HIGHWAY DIESEL (1000 BBL) | 181. | 301. | 644. | 847. | 345. | 352. | 1185. | 737. |
| CEMENT PLANT (1000 TONS) | 404. | 552. | 708. | 703. | 952. | 1207. | 1429. | 1290. |

TABLE 1. FUEL CONSUMPTION 1900-1945 FOR THE STATE OF ARKANSAS

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL(1000 TONS) | | | | | | | | | | |
| ELECTRIC UTILITIES | 30. | 50. | 68. | 91. | 108. | 122. | 105. | 62. | 76. | 78. |
| INDUSTRIAL BOILERS | 166. | 239. | 311. | 388. | 358. | 279. | 184. | 124. | 110. | 93. |
| COMMERCIAL-RESIDENTIAL | 139. | 209. | 286. | 394. | 421. | 480. | 469. | 313. | 257. | 258. |
| ANTHRACITE COAL (1000 TONS) | | | | | | | | | | |
| ALL USES | 1. | 1. | 1. | 1. | 1. | 1. | NA | NA | NA | NA |
| RESIDUAL OIL (1000 BBL) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | NA | NA | NA | NA | 25. |
| INDUSTRIAL | NA | NA | NA | NA | NA | 246. | 235. | 233. | 317. | 181. |
| COMMERCIAL | NA | NA | NA | NA | NA | 142. | 241. | 386. | 292. | 73. |
| DISTILLATE OIL (1000 BBL) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | 58. | 46. | 41. | 62. | 55. |
| INDUSTRIAL | NA | NA | NA | NA | NA | 187. | 179. | 177. | 16. | 93. |
| COMMERCIAL -RESIDENTIAL | NA | NA | NA | NA | NA | 113. | 191. | 307. | 460. | 936. |
| NATURAL GAS (10E6 CU. FT.) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | 283. | 592. | 1544. | 1519. | 2221. | 7727. |
| INDUSTRIAL | NA | NA | NA | 184. | 13920. | 45397. | 28349. | 17706. | 27300. | 76807. |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | NA | 654. | 5130. | 6146. | 8338. | 5470. | 10198. | 14391. |
| WOOD (1000 TONS) | | | | | | | | | | |
| ALL USES | 4412. | 4191. | 4015. | 3838. | 3662. | 3485. | 3309. | 3176. | 3088. | 2868. |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE(1000 GAL) | NA | NA | NA | NA | NA | 73833. | 128931. | 127354. | 178275. | 191823. |
| DIESEL (1000 GAL.) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL(1000 TONS) | 678. | 1014. | 1307. | 1501. | 1648. | 1326. | 1104. | 836. | 878. | 1196. |
| RAILROADS-OIL(1000 BBL) | NA | NA | NA | NA | NA | 1935. | 1819. | 1491. | 1351. | 2203. |
| COKE PL (1000 TONS COAL) | 0. | 0. | 0. | 0. | 0. | 0. | 1. | 3. | 7. | 10. |
| VES FUEL OIL (1000 BBL) | NA | NA | NA | NA | NA | NA | NA | NA | NA | 53. |
| CEMENT PL (1000 TONS) | 8. | NA | 0. | 0. | 0. | 0. | NA | NA | NA | NA |

TABLE 2. FUEL CONSUMPTION 1950-1980 FOR THE STATE OF ARKANSAS

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL(1000 TONS) | | | | | | | | |
| ELECTRIC UTILITIES | 5. | 0. | 0. | 0. | 0. | 0. | 1785. | 3389. |
| INDUSTRIAL BOILERS | 0. | 50. | 30. | 34. | 0. | 34. | 298. | 362. |
| COMMERCIAL-RESIDENTIAL | 3. | 2. | 1. | 1. | 0. | 0. | 1. | 6. |
| ANTHRACITE COAL (1000 TONS) | | | | | | | | |
| ALL USES | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| RESIDUAL OIL (1000 BBL) | | | | | | | | |
| ELECTRIC UTILITIES | 77. | 45. | 62. | 6. | 1347. | 4150. | 12626. | 2789. |
| INDUSTRIAL | 171. | 122. | 409. | 347. | 182. | 3180. | 3575. | 1441. |
| COMMERCIAL | 8. | 2. | 0. | 0. | 1. | 1473. | 469. | 438. |
| DISTILLATE OIL (1000 BBL) | | | | | | | | |
| ELECTRIC UTILITIES | 86. | 37. | 41. | 26. | 23. | 140. | 1291. | 335. |
| INDUSTRIAL | 226. | 114. | 124. | 192. | 231. | 735. | 1178. | 418. |
| COMMERCIAL-RESIDENTIAL | 1688. | 1353. | 349. | 484. | 1334. | 3193. | 2209. | 434. |
| NATURAL GAS (10E6 CU. FT.) | | | | | | | | |
| ELECTRIC UTILITIES | 19483. | 46297. | 46779. | 65699. | 107797. | 31818. | 6993. | 58863. |
| INDUSTRIAL | 106956. | 155549. | 116900. | 153235. | 152580. | 128151. | 116138. | 123931. |
| PIPELINES | 5644. | 9307. | 13787. | 17094. | 22613. | 12217. | 16417. | 13401. |
| COMMERCIAL-RESIDENTIAL | 23009. | 32518. | 50421. | 64453. | 98961. | 81834. | 82549. | 77525. |
| WOOD (1000 TONS) | | | | | | | | |
| ELECTRIC UTILITIES | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| INDUSTRIAL | 805. | 954. | 1028. | 1253. | 1498. | 1576. | 2467. | 2066. |
| COMMERCIAL | 34. | 26. | 21. | 15. | 9. | 9. | 10. | 11. |
| RESIDENTIAL | 1808. | 1394. | 1127. | 775. | 485. | 500. | 546. | 565. |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE (1000 GAL.) | 351190. | 475453. | 601033. | 784540. | NA | NA | NA | NA |
| DIESEL (1000 GAL.) | 8022. | 8610. | 11592. | 23016. | 99204. | 138894. | 209496. | 207564. |
| RURAL VMT (10E6 MILES) | NA | NA | NA | NA | 7721. | 9159. | 11119. | 10781. |
| URBAN VMT (10E6 MILES) | NA | NA | NA | NA | 3564. | 4784. | 5309. | 5451. |
| OTHER | | | | | | | | |
| RAILROADS-COAL(1000 TONS) | 651. | 211. | 44. | 22. | 10. | 0. | 0. | 0. |
| -OIL(1000 BBL) | 2589. | 947. | 627. | 1050. | 1197. | 2394. | 1531. | 1630. |
| COKE PLANTS (1000 TONS COAL) | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| VESSELS-DISTILLATE(1000 BBL) | 32. | 50. | 3. | 32. | 7. | 77. | 67. | 14. |
| -RESIDUAL(1000 BBL) | 28. | 10. | 0. | 9. | 1. | 2. | 1. | 0. |
| OFF HIGHWAY DIESEL (1000 BBL) | 302. | 337. | 719. | 677. | 915. | 945. | 1843. | 1411. |
| CEMENT PLANT (1000 TONS) | 413. | 523. | 593. | 648. | 839. | 899. | 1118. | 1109. |

TABLE 1. FUEL CONSUMPTION 1900-1945 FOR THE STATE OF CALIFORNIA

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL(1000 TONS) | | | | | | | | | | |
| ELECTRIC UTILITIES | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| INDUSTRIAL BOILERS | 273. | 350. | 405. | 445. | 330. | 135. | 52. | 56. | 78. | 106. |
| COMMERCIAL-RESIDENTIAL | 245. | 328. | 400. | 489. | 497. | 567. | 556. | 374. | 310. | 319. |
| ANTHRACITE COAL (1000 TONS) | | | | | | | | | | |
| ALL USES | 0. | 0. | 0. | 1. | 1. | 0. | NA | NA | NA | NA |
| RESIDUAL OIL (1000 BBL) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | 1277. | 1015. | 897. | 550. | 2900. |
| INDUSTRIAL | NA | NA | NA | NA | NA | 9956. | 9516. | 9421. | 13461. | 16584. |
| COMMERCIAL | NA | NA | NA | NA | NA | 2994. | 5086. | 8162. | 10107. | 48603. |
| DISTILLATE OIL (1000 BBL) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | 122. | 97. | 86. | 5. | 102. |
| INDUSTRIAL | NA | NA | NA | NA | NA | 226. | 216. | 214. | 484. | 642. |
| COMMERCIAL -RESIDENTIAL | NA | NA | NA | NA | NA | 1643. | 2790. | 4478. | 2849. | 6854. |
| NATURAL GAS (10E6 CU. FT.) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | 4798. | 10033. | 26173. | 9550. | 13967. | 35097. |
| INDUSTRIAL | NA | NA | 25187. | 17680. | 53957. | 169105. | 261097. | 159453. | 245853. | 330006. |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | 246. | 4211. | 12084. | 18684. | 47519. | 49419. | 92130. | 172436. |
| WOOD (1000 TONS) | | | | | | | | | | |
| ALL USES | 8278. | 7864. | 7533. | 7202. | 6871. | 6540. | 6209. | 5960. | 5795. | 5381. |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE(1000 GAL) | NA | NA | NA | NA | NA | 750171. | 1165842. | 1343579. | 1766144. | 1807578. |
| DIESEL (1000 GAL.) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL(1000 TONS) | 2464. | 3292. | 3767. | 3805. | 3955. | 3181. | 2650. | 2008. | 2106. | 2870. |
| RAILROADS-OIL(1000 BBL) | NA | NA | NA | NA | NA | 21548. | 20260. | 16605. | 16462. | 30321. |
| COKE PL (1000 TONS COAL) | 0. | 0. | 0. | 0. | 0. | 0. | 110. | 211. | 553. | 896. |
| VES FUEL OIL (1000 BBL) | NA | NA | NA | NA | NA | 27862. | 33078. | 26208. | 22781. | 28566. |
| CEMENT PL (1000 TONS) | 8. | 230. | NA | 847. | 1334. | 2462. | 1103. | 1499. | 2673. | 2999. |

TABLE 2. FUEL CONSUMPTION 1950-1980 FOR THE STATE OF CALIFORNIA

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL(1000 TONS) | | | | | | | | |
| ELECTRIC UTILITIES | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| INDUSTRIAL BOILERS | 1037. | 970. | 15. | 389. | 12. | 275. | 1128. | 1394. |
| COMMERCIAL-RESIDENTIAL | 19. | 12. | 7. | 11. | 128. | 0. | 1. | 4. |
| ANTHRACITE COAL (1000 TONS) | | | | | | | | |
| ALL USES | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| RESIDUAL OIL (1000 BBL) | | | | | | | | |
| ELECTRIC UTILITIES | 10973. | 19526. | 23315. | 16410. | 16871. | 80109. | 77320. | 75914. |
| INDUSTRIAL | 15315. | 16365. | 12485. | 15407. | 17538. | 10017. | 9758. | 12565. |
| COMMERCIAL | 16492. | 13869. | 4362. | 1746. | 8665. | 3554. | 3026. | 7302. |
| DISTILLATE OIL (1000 BBL) | | | | | | | | |
| ELECTRIC UTILITIES | 90. | 31. | 246. | 90. | 100. | 1966. | 2792. | 897. |
| INDUSTRIAL | 1389. | 2406. | 3678. | 4724. | 5815. | 5119. | 8104. | 4014. |
| COMMERCIAL-RESIDENTIAL | 7905. | 10081. | 3507. | 1823. | 5198. | 7367. | 10062. | 8514. |
| NATURAL GAS (10E6 CU. FT.) | | | | | | | | |
| ELECTRIC UTILITIES | 78322. | 183664. | 322992. | 540338. | 636257. | 274483. | 302167. | 518808. |
| INDUSTRIAL | 426643. | 636687. | 495092. | 564346. | 618647. | 581609. | 417829. | 423349. |
| PIPELINES | 5223. | 8988. | 10583. | 15647. | 109073. | 105120. | 84323. | 78081. |
| COMMERCIAL-RESIDENTIAL | 252058. | 3765. | 473666. | 652679. | 762489. | 871637. | 758853. | 787493. |
| WOOD (1000 TONS) | | | | | | | | |
| ELECTRIC UTILITIES | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| INDUSTRIAL | 2565. | 3041. | 3276. | 4346. | 5331. | 5772. | 7182. | 7064. |
| COMMERCIAL | 45. | 35. | 28. | 24. | 27. | 30. | 40. | 50. |
| RESIDENTIAL | 2357. | 1817. | 1469. | 1259. | 1406. | 1598. | 2086. | 2624. |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE (1000 GAL.) | 3202276. | 3948200. | 5672885. | 7367881. | NA | NA | NA | NA |
| DIESEL (1000 GAL.) | 182196. | 163842. | 223104. | 358638. | 714756. | 750498. | 1074276. | 1137486. |
| RURAL VMT (10E6 MILES) | NA | NA | NA | NA | 41309. | 37796. | 45561. | 43620. |
| URBAN VMT (10E6 MILES) | NA | NA | NA | NA | 75683. | 94804. | 116828. | 112270. |
| OTHER | | | | | | | | |
| RAILROADS-COAL(1000 TONS) | 1564. | 508. | 107. | 53. | 24. | 0. | 0. | 0. |
| -OIL(1000 BBL) | 15644. | 11040. | 5960. | 8392. | 10111. | 6567. | 5960. | 7288. |
| COKE PLANTS (1000 TONS COAL) | 846. | 1357. | 1336. | 2080. | 2177. | 1861. | 1442. | 1730. |
| VESSELS-DISTILLATE(1000 BBL) | 424. | 398. | 615. | 617. | 581. | 379. | 1136. | 567. |
| -RESIDUAL(1000 BBL) | 4816. | 5914. | 6719. | 4580. | 5403. | 4963. | 12531. | 16583. |
| OFF HIGHWAY DIESEL (1000 BBL) | 2287. | 3314. | 4235. | 7683. | 2818. | 3631. | 4203. | 2702. |
| CEMENT PLANT (1000 TONS) | 4940. | 6665. | 7500. | 8492. | 9414. | 7211. | 9315. | 8849. |

TABLE 1. FUEL CONSUMPTION 1900-1945 FOR THE STATE OF COLORADO

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL(1000 TONS) | | | | | | | | | | |
| ELECTRIC UTILITIES | 143. | 238. | 325. | 433. | 481. | 475. | 401. | 261. | 370. | 476. |
| INDUSTRIAL BOILERS | 1538. | 2069. | 2520. | 2941. | 2792. | 2466. | 1858. | 1415. | 1478. | 1570. |
| COMMERCIAL-RESIDENTIAL | 836. | 1176. | 1508. | 1952. | 2032. | 2318. | 2354. | 1704. | 1565. | 1884. |
| ANTHRACITE COAL (1000 TONS) | | | | | | | | | | |
| ALL USES | 0. | 1. | 1. | 1. | 1. | 0. | NA | NA | NA | NA |
| RESIDUAL OIL (1000 BBL) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | 38. | 31. | 27. | 56. | 42. |
| INDUSTRIAL | NA | NA | NA | NA | NA | 169. | 162. | 160. | 207. | 537. |
| COMMERCIAL | NA | NA | NA | NA | NA | 6. | 9. | 15. | 43. | 4. |
| DISTILLATE OIL (1000 BBL) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | 16. | 12. | 11. | 37. | 71. |
| INDUSTRIAL | NA | NA | NA | NA | NA | 7. | 7. | 7. | 43. | 39. |
| COMMERCIAL -RESIDENTIAL | NA | NA | NA | NA | NA | 21. | 36. | 57. | 135. | 245. |
| NATURAL GAS (10E6 CU. FT.) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | NA | NA | 496. | 725. | 5375. |
| INDUSTRIAL | NA | NA | NA | NA | 1. | 574. | 11501. | 8708. | 13426. | 22520. |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | NA | 1. | 8. | 1. | 5141. | 4270. | 7960. | 12357. |
| WOOD (1000 TONS) | | | | | | | | | | |
| ALL USES | 837. | 795. | 761. | 728. | 694. | 661. | 628. | 602. | 586. | 544. |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE(1000 GAL) | NA | NA | NA | NA | NA | 97754. | 154355. | 155125. | 210964. | 195800. |
| DIESEL (1000 GAL.) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL(1000 TONS) | 875. | 1224. | 1476. | 1583. | 1691. | 1360. | 1133. | 859. | 901. | 1227. |
| RAILROADS-OIL(1000 BBL) | NA | NA | NA | NA | NA | 196. | 184. | 151. | 353. | 1027. |
| COKE PL (1000 TONS COAL) | 951. | 1134. | 1445. | 1392. | 1502. | 1204. | 1101. | 760. | 1165. | 1297. |
| VES FUEL OIL (1000 BBL) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CEMENT PL (1000 TONS) | 7. | 148. | NA | NA | NA | NA | NA | NA | NA | NA |

TABLE 2. FUEL CONSUMPTION 1950-1980 FOR THE STATE OF COLORADO

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL(1000 TONS) | | | | | | | | |
| ELECTRIC UTILITIES | 301. | 460. | 1221. | 2181. | 3264. | 6431. | 9109. | 11583. |
| INDUSTRIAL BOILERS | 512. | 479. | 560. | 452. | 577. | 689. | 564. | 852. |
| COMMERCIAL-RESIDENTIAL | 915. | 576. | 257. | 320. | 271. | 14. | 54. | 99. |
| ANTHRACITE COAL (1000 TONS) | | | | | | | | |
| ALL USES | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| RESIDUAL OIL (1000 BBL) | | | | | | | | |
| ELECTRIC UTILITIES | 147. | 74. | 51. | 19. | 269. | 1014. | 358. | 141. |
| INDUSTRIAL | 568. | 731. | 1179. | 684. | 710. | 1128. | 1264. | 1616. |
| COMMERCIAL | 11. | 41. | 384. | 559. | 341. | 1166. | 2008. | 3. |
| DISTILLATE OIL (1000 BBL) | | | | | | | | |
| ELECTRIC UTILITIES | 104. | 48. | 58. | 18. | 24. | 399. | 370. | 164. |
| INDUSTRIAL | 99. | 157. | 360. | 182. | 365. | 677. | 936. | 1224. |
| COMMERCIAL-RESIDENTIAL | 350. | 854. | 1161. | 1557. | 1691. | 2456. | 2284. | 555. |
| NATURAL GAS (10E6 CU. FT.) | | | | | | | | |
| ELECTRIC UTILITIES | 19954. | 35550. | 37015. | 26706. | 51275. | 52930. | 29440. | 31928. |
| INDUSTRIAL | 54288. | 92217. | 87912. | 102788. | 84788. | 65609. | 59434. | 53185. |
| PIPELINES | 1098. | 1237. | 1238. | 1906. | 4589. | 13012. | 15478. | 14598. |
| COMMERCIAL-RESIDENTIAL | 33306. | 49564. | 80793. | 104649. | 141676. | 176221. | 163486. | 156652. |
| WOOD (1000 TONS) | | | | | | | | |
| ELECTRIC UTILITIES | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| INDUSTRIAL | 99. | 117. | 126. | 170. | 255. | 250. | 494. | 433. |
| COMMERCIAL | 8. | 6. | 5. | 4. | 4. | 5. | 8. | 10. |
| RESIDENTIAL | 395. | 304. | 246. | 208. | 227. | 271. | 398. | 542. |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE (1000 GAL.) | 363203. | 507498. | 648759. | 806979. | NA | NA | NA | NA |
| DIESEL (1000 GAL.) | 10206. | 15288. | 29946. | 35910. | 76188. | 100464. | 133098. | 141036. |
| RURAL VMT (10E6 MILES) | NA | NA | NA | NA | 7065. | 8295. | 9416. | 10003. |
| URBAN VMT (10E6 MILES) | NA | NA | NA | NA | 6133. | 8302. | 10401. | 12408. |
| OTHER | | | | | | | | |
| RAILROADS-COAL(1000 TONS) | 669. | 217. | 46. | 22. | 10. | 0. | 0. | 0. |
| -OIL(1000 BBL) | 860. | 1428. | 1475. | 1541. | 1033. | 1487. | 2016. | 3055. |
| COKE PLANTS (1000 TONS COAL) | 1182. | 1185. | 888. | 1093. | 1024. | 1085. | 771. | 888. |
| VESSELS-DISTILLATE(1000 BBL) | 0. | 0. | 0. | 1. | 0. | 0. | 0. | 0. |
| -RESIDUAL(1000 BBL) | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| OFF HIGHWAY DIESEL (1000 BBL) | 202. | 250. | 678. | 1273. | 1055. | 949. | 968. | 962. |
| CEMENT PLANT (1000 TONS) | 455. | 621. | 797. | 791. | 952. | 1207. | 1429. | 1290. |

TABLE 1. FUEL CONSUMPTION 1900-1945 FOR THE STATE OF CONNECTICUT

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL(1000 TONS) | | | | | | | | | | |
| ELECTRIC UTILITIES | 150. | 249. | 341. | 455. | 530. | 585. | 568. | 425. | 702. | 1060. |
| INDUSTRIAL BOILERS | 1069. | 1422. | 1710. | 1968. | 1994. | 2019. | 1623. | 1240. | 1303. | 1391. |
| COMMERCIAL-RESIDENTIAL | 186. | 259. | 328. | 419. | 434. | 495. | 518. | 399. | 395. | 521. |
| ANTHRACITE COAL (1000 TONS) | | | | | | | | | | |
| ALL USES | 1284. | 1740. | 1876. | 1967. | 1984. | 1482. | 516. | 390. | 648. | 695. |
| RESIDUAL OIL (1000 BBL) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | 1168. | 929. | 821. | 1640. | 1373. |
| INDUSTRIAL | NA | NA | NA | NA | NA | 1640. | 1568. | 1552. | 1469. | 1655. |
| COMMERCIAL | NA | NA | NA | NA | NA | 3. | 6. | 9. | 226. | 346. |
| DISTILLATE OIL (1000 BBL) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | 243. | 193. | 171. | 110. | 285. |
| INDUSTRIAL | NA | NA | NA | NA | NA | 242. | 231. | 229. | 296. | 449. |
| COMMERCIAL -RESIDENTIAL | NA | NA | NA | NA | NA | 1055. | 1793. | 2877. | 3839. | 3844. |
| NATURAL GAS (10E6 CU. FT.) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | 0. | 0. | 0. | 0. | 0. | 0. |
| INDUSTRIAL | NA | NA | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| WOOD (1000 TONS) | | | | | | | | | | |
| ALL USES | 1392. | 1322. | 1266. | 1211. | 1155. | 1099. | 1044. | 1002. | 974. | 905. |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE(1000 GAL) | NA | NA | NA | NA | NA | 122369. | 224270. | 268019. | 365429. | 271362. |
| DIESEL (1000 GAL.) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL(1000 TONS) | 731. | 1011. | 1204. | 1274. | 1376. | 1141. | 981. | 768. | 859. | 1278. |
| RAILROADS-OIL(1000 BBL) | NA | NA | NA | NA | NA | 127. | 120. | 98. | 115. | 407. |
| COKE PL (1000 TONS COAL) | 77. | 91. | 115. | 109. | 156. | 191. | 226. | 184. | 330. | 425. |
| VES FUEL OIL (1000 BBL) | NA | NA | NA | NA | NA | 33. | 39. | 31. | 163. | 64. |
| CEMENT PL (1000 TONS) | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |

TABLE 2. FUEL CONSUMPTION 1950-1980 FOR THE STATE OF CONNECTICUT

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL(1000 TONS) | | | | | | | | |
| ELECTRIC UTILITIES | 1022. | 2248. | 2776. | 4097. | 1700. | 0. | 14. | 0. |
| INDUSTRIAL BOILERS | 391. | 366. | 365. | 367. | 132. | 24. | 0. | 0. |
| COMMERCIAL-RESIDENTIAL | 168. | 106. | 84. | 11. | 0. | 0. | 0. | 16. |
| ANTHRACITE COAL (1000 TONS) | | | | | | | | |
| ALL USES | 794. | 330. | 114. | 48. | 13. | 7. | 5. | 15. |
| RESIDUAL OIL (1000 BBL) | | | | | | | | |
| ELECTRIC UTILITIES | 5040. | 2030. | 1698. | 2703. | 21025. | 21738. | 20205. | 20292. |
| INDUSTRIAL | 6296. | 6435. | 8571. | 9560. | 9881. | 5296. | 10093. | 6696. |
| COMMERCIAL | 240. | 119. | 3981. | 4035. | 5003. | 4313. | 5579. | 1173. |
| DISTILLATE OIL (1000 BBL) | | | | | | | | |
| ELECTRIC UTILITIES | 492. | 48. | 38. | 18. | 1064. | 1294. | 74. | 108. |
| INDUSTRIAL | 629. | 912. | 921. | 914. | 675. | 741. | 1095. | 2636. |
| COMMERCIAL-RESIDENTIAL | 5176. | 5053. | 27754. | 20223. | 20298. | 17245. | 18901. | 16539. |
| NATURAL GAS (10E6 CU. FT.) | | | | | | | | |
| ELECTRIC UTILITIES | 0. | 852. | 1756. | 209. | 147. | 344. | 0. | 0. |
| INDUSTRIAL | 0. | 4029. | 8422. | 13664. | 14690. | 15553. | 16411. | 20317. |
| PIPELINES | 0. | 57. | 222. | 100. | 50. | 43. | 40. | 71. |
| COMMERCIAL-RESIDENTIAL | 0. | 10101. | 19190. | 27966. | 45687. | 48071. | 48740. | 52195. |
| WOOD (1000 TONS) | | | | | | | | |
| ELECTRIC UTILITIES | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| INDUSTRIAL | 348. | 412. | 444. | 504. | 556. | 601. | 732. | 762. |
| COMMERCIAL | 10. | 7. | 6. | 5. | 7. | 7. | 11. | 14. |
| RESIDENTIAL | 477. | 367. | 297. | 278. | 358. | 386. | 575. | 759. |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE (1000 GAL.) | 487547. | 665370. | 789875. | 999523. | NA | NA | NA | NA |
| DIESEL (1000 GAL.) | 2394. | 2940. | 10164. | 35490. | 75306. | 78246. | 95802. | 102732. |
| RURAL VMT (10E6 MILES) | NA | NA | NA | NA | 3643. | 3473. | 4681. | 5203. |
| URBAN VMT (10E6 MILES) | NA | NA | NA | NA | 12803. | 14761. | 14206. | 14206. |
| OTHER | | | | | | | | |
| RAILROADS-COAL(1000 TONS) | 551. | 112. | 13. | 0. | 0. | 0. | 0. | 0. |
| -OIL(1000 BBL) | 785. | 1122. | 691. | 480. | 495. | 336. | 256. | 93. |
| COKE PLANTS (1000 TONS COAL) | 407. | 439. | 366. | 154. | 0. | 0. | 0. | 0. |
| VESSELS-DISTILLATE(1000 BBL) | 2. | 3. | 15. | 10. | 11. | 14. | 10. | 7. |
| -RESIDUAL(1000 BBL) | 6. | 20. | 9. | 13. | 26. | 132. | 106. | 13. |
| OFF HIGHWAY DIESEL (1000 BBL) | 60. | 84. | 73. | 188. | 440. | 617. | 523. | 422. |
| CEMENT PLANT (1000 TONS) | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |

TABLE 1. FUEL CONSUMPTION 1900-1945 FOR THE STATE OF DELAWARE

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL(1000 TONS) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDUSTRIAL BOILERS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACITE COAL (1000 TONS) | | | | | | | | | | |
| ALL USES | 137. | 186. | 200. | 210. | 212. | 158. | 157. | 119. | 198. | 297. |
| RESIDUAL OIL (1000 BBL) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | 7. | 6. | 5. | NA | 10. |
| INDUSTRIAL | NA | NA | NA | NA | NA | 1323. | 1265. | 1252. | 1209. | 1054. |
| COMMERCIAL | NA | NA | NA | NA | NA | 5. | 8. | 13. | 2. | 25. |
| DISTILLATE OIL (1000 BBL) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | 6. | 5. | 4. | 42. | 14. |
| INDUSTRIAL | NA | NA | NA | NA | NA | 7. | 7. | 7. | 53. | 54. |
| COMMERCIAL -RESIDENTIAL | NA | NA | NA | NA | NA | 28. | 47. | 76. | 125. | 157. |
| NATURAL GAS (10E6 CU. FT.) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | 0. | 0. | 0. | 0. | 0. | 0. |
| INDUSTRIAL | NA | NA | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| WOOD (1000 TONS) | | | | | | | | | | |
| ALL USES | 502. | 477. | 457. | 436. | 416. | 396. | 376. | 361. | 351. | 326. |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE(1000 GAL) | NA | NA | NA | NA | NA | 17555. | 33917. | 44088. | 59647. | 48471. |
| DIESEL (1000 GAL.) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL(1000 TONS) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RAILROADS-OIL(1000 BBL) | NA | NA | NA | NA | NA | 6. | 6. | 5. | 16. | 4. |
| COKE PL (1000 TONS COAL) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VES FUEL OIL (1000 BBL) | NA | NA | NA | NA | NA | 17. | 20. | 16. | 26. | 14. |
| CEMENT PL (1000 TONS) | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |

TABLE 2. FUEL CONSUMPTION 1950-1980 FOR THE STATE OF DELAWARE

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL(1000 TONS) | | | | | | | | |
| ELECTRIC UTILITIES | 9. | 455. | 737. | 1055. | 1561. | 972. | 785. | 1133. |
| INDUSTRIAL BOILERS | 184. | 172. | 974. | 1090. | 155. | 20. | 106. | 198. |
| COMMERCIAL-RESIDENTIAL | 76. | 48. | 43. | 29. | 10. | 0. | 0. | 4. |
| ANTHRACITE COAL (1000 TONS) | | | | | | | | |
| ALL USES | 264. | 149. | 97. | 36. | 20. | 11. | 11. | 4. |
| RESIDUAL OIL (1000 BBL) | | | | | | | | |
| ELECTRIC UTILITIES | 20. | 22. | 4. | 63. | 1541. | 6081. | 7570. | 5995. |
| INDUSTRIAL | 1711. | 2406. | 3407. | 3993. | 3430. | 1732. | 2004. | 1705. |
| COMMERCIAL | 1. | 28. | 726. | 505. | 626. | 877. | 972. | 4274. |
| DISTILLATE OIL (1000 BBL) | | | | | | | | |
| ELECTRIC UTILITIES | 23. | 33. | 40. | 51. | 310. | 415. | 894. | 193. |
| INDUSTRIAL | 90. | 157. | 203. | 157. | 152. | 729. | 559. | 285. |
| COMMERCIAL-RESIDENTIAL | 673. | 737. | 3240. | 3406. | 3728. | 3307. | 2766. | 2267. |
| NATURAL GAS (10E6 CU. FT.) | | | | | | | | |
| ELECTRIC UTILITIES | 0. | 1703. | 3190. | 4729. | 3744. | 1697. | 1485. | 6999. |
| INDUSTRIAL | 27. | 823. | 1602. | 6679. | 12030. | 6957. | 8675. | 12642. |
| PIPELINES | 0. | 0. | 0. | 0. | 0. | 0. | 3. | 0. |
| COMMERCIAL-RESIDENTIAL | 38976. | 2946. | 4378. | 6992. | 10647. | 9949. | 10463. | 10156. |
| WOOD (1000 TONS) | | | | | | | | |
| ELECTRIC UTILITIES | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| INDUSTRIAL | 157. | 186. | 200. | 256. | 344. | 385. | 505. | 380. |
| COMMERCIAL | 3. | 2. | 2. | 1. | 1. | 1. | 2. | 3. |
| RESIDENTIAL | 141. | 109. | 88. | 67. | 63. | 73. | 113. | 156. |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE (1000 GAL.) | 91123. | 131716. | 171110. | 215675. | NA | NA | NA | NA |
| DIESEL (1000 GAL.) | 1050. | 1638. | 2730. | 7896. | 13482. | 12684. | 21924. | 34650. |
| RURAL VMT (10E6 MILES) | NA | NA | NA | NA | 1534. | 1831. | 2086. | 2149. |
| URBAN VMT (10E6 MILES) | NA | NA | NA | NA | 1424. | 1794. | 2146. | 2083. |
| OTHER | | | | | | | | |
| RAILROADS-COAL(1000 TONS) | 102. | 32. | 6. | 0. | 0. | 0. | 0. | 0. |
| -OIL(1000 BBL) | 69. | 70. | 72. | 34. | 82. | 50. | 20. | 462. |
| COKE PLANTS (1000 TONS COAL) | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| VESSELS-DISTILLATE(1000 BBL) | 2. | 7. | 5. | 7. | 5. | 13. | 30. | 13. |
| -RESIDUAL(1000 BBL) | 103. | 25. | 226. | 123. | 134. | 211. | 182. | 98. |
| OFF HIGHWAY DIESEL (1000 BBL) | 14. | 40. | 12. | 74. | 180. | 83. | 88. | 167. |
| CEMENT PLANT (1000 TONS) | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |

TABLE 1. FUEL CONSUMPTION 1900-1945 FOR THE STATE OF DISTRICT OF COLUMBIA

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL(1000 TONS) | | | | | | | | | | |
| ELECTRIC UTILITIES | 40. | 66. | 90. | 120. | 133. | 132. | 116. | 82. | 126. | 180. |
| INDUSTRIAL BOILERS | 368. | 431. | 441. | 411. | 400. | 449. | 377. | 289. | 304. | 326. |
| COMMERCIAL-RESIDENTIAL | 22. | 26. | 28. | 30. | 28. | 32. | 44. | 50. | 67. | 115. |
| ANTHRACITE COAL (1000 TONS) | | | | | | | | | | |
| ALL USES | 131. | 177. | 191. | 200. | 202. | 151. | 223. | 169. | 280. | 269. |
| RESIDUAL OIL (1000 BBL) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | 450. | 357. | 316. | 310. | 119. |
| INDUSTRIAL | NA | NA | NA | NA | NA | 73. | 70. | 69. | 119. | 76. |
| COMMERCIAL | NA | NA | NA | NA | NA | 32. | 54. | 86. | 43. | 23. |
| DISTILLATE OIL (1000 BBL) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | 30. | 24. | 21. | 31. | 41. |
| INDUSTRIAL | NA | NA | NA | NA | NA | 41. | 39. | 39. | 27. | 14. |
| COMMERCIAL -RESIDENTIAL | NA | NA | NA | NA | NA | 33. | 56. | 90. | 178. | 200. |
| NATURAL GAS (10E6 CU. FT.) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | 0. | 0. | 0. | NA | NA | NA |
| INDUSTRIAL | NA | NA | 0. | 0. | 0. | 0. | 0. | NA | NA | NA |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | 0. | 0. | 0. | 0. | 0. | NA | NA | NA |
| WOOD (1000 TONS) | | | | | | | | | | |
| ALL USES | 18. | 17. | 17. | 16. | 15. | 14. | 14. | 13. | 13. | 12. |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE(1000 GAL) | NA | NA | NA | NA | NA | 46809. | 83908. | 116415. | 165195. | 109324. |
| DIESEL (1000 GAL.) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL(1000 TONS) | 154. | 187. | 190. | 163. | 163. | 142. | 129. | 106. | 122. | 186. |
| RAILROADS-OIL(1000 BBL) | NA | NA | NA | NA | NA | 29. | 27. | 22. | 106. | 163. |
| COKE PL (1000 TONS COAL) | 0. | 0. | 0. | 0. | 0. | 0. | 43. | 83. | 219. | 355. |
| VES FUEL OIL (1000 BBL) | NA | NA | NA | NA | NA | 5. | 6. | 5. | 16. | 7. |
| CEMENT PL (1000 TONS) | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |

TABLE 2. FUEL CONSUMPTION 1950-1980 FOR THE STATE OF DISTRICT OF COLUMBIA

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL(1000 TONS) | | | | | | | | |
| ELECTRIC UTILITIES | 787. | 719. | 446. | 293. | 681. | 112. | 0. | 0. |
| INDUSTRIAL BOILERS | 97. | 91. | 422. | 145. | 385. | 246. | 80. | 23. |
| COMMERCIAL-RESIDENTIAL | 462. | 291. | 134. | 103. | 47. | 10. | 0. | 109. |
| ANTHRACITE COAL (1000 TONS) | | | | | | | | |
| ALL USES | 185. | 87. | 28. | 19. | 7. | 4. | 4. | 0. |
| RESIDUAL OIL (1000 BBL) | | | | | | | | |
| ELECTRIC UTILITIES | 93. | 22. | 18. | 12. | 2776. | 2093. | 658. | 286. |
| INDUSTRIAL | 159. | 310. | 128. | 189. | 67. | 50. | 38. | 28. |
| COMMERCIAL | 26. | 26. | 2205. | 6229. | 8297. | 2096. | 1537. | 96. |
| DISTILLATE OIL (1000 BBL) | | | | | | | | |
| ELECTRIC UTILITIES | 0. | 53. | 36. | 80. | 1137. | 120. | 3205. | 1288. |
| INDUSTRIAL | 13. | 58. | 8. | 13. | 9. | 17. | 39. | 39. |
| COMMERCIAL-RESIDENTIAL | 354. | 366. | 2597. | 2480. | 3090. | 2403. | 2362. | 1480. |
| NATURAL GAS (10E6 CU. FT.) | | | | | | | | |
| ELECTRIC UTILITIES | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| INDUSTRIAL | 128. | 668. | 1300. | 800. | 4401. | 4317. | 3518. | 386. |
| PIPELINES | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| COMMERCIAL-RESIDENTIAL | 4887. | 12160. | 18070. | 21169. | 32961. | 31835. | 32794. | 27482. |
| WOOD (1000 TONS) | | | | | | | | |
| ELECTRIC UTILITIES | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| INDUSTRIAL | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| COMMERCIAL | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| RESIDENTIAL | 11. | 9. | 7. | 5. | 6. | 7. | 11. | 14. |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE (1000 GAL.) | 196276. | 205942. | 206656. | 239806. | NA | NA | NA | NA |
| DIESEL (1000 GAL.) | 3990. | 3864. | 7686. | 16212. | 19908. | 15834. | 17430. | 17052. |
| RURAL VMT (10E6 MILES) | NA | NA | NA | NA | 0. | 0. | 0. | 0. |
| URBAN VMT (10E6 MILES) | NA | NA | NA | NA | 2821. | 3082. | 3549. | 3293. |
| OTHER | | | | | | | | |
| RAILROADS-COAL(1000 TONS) | NA | NA | NA | NA | NA | 0. | 0. | 0. |
| -OIL(1000 BBL) | 320. | 410. | 61. | 11. | 136. | 158. | 143. | 93. |
| COKE PLANTS (1000 TONS COAL) | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| VESSELS-DISTILLATE(1000 BBL) | 1. | 3. | 12. | 0. | 0. | 0. | 0. | 0. |
| -RESIDUAL(1000 BBL) | 6. | 3. | 4. | 0. | 1. | 0. | 0. | 0. |
| OFF HIGHWAY DIESEL (1000 BBL) | 10. | 22. | 28. | 57. | 47. | 19. | 19. | 13. |
| CEMENT PLANT (1000 TONS) | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |

TABLE 1. FUEL CONSUMPTION 1900-1945 FOR THE STATE OF FLORIDA

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL(1000 TONS) | | | | | | | | | | |
| ELECTRIC UTILITIES | 9. | 15. | 21. | 28. | 30. | 27. | 52. | 73. | 172. | 333. |
| INDUSTRIAL BOILERS | 30. | 57. | 92. | 135. | 152. | 160. | 152. | 146. | 188. | 241. |
| COMMERCIAL-RESIDENTIAL | 21. | 41. | 70. | 112. | 126. | 144. | 217. | 259. | 360. | 630. |
| ANTHRACITE COAL (1000 TONS) | | | | | | | | | | |
| ALL USES | 16. | 22. | 24. | 25. | 25. | 19. | NA | NA | NA | NA |
| RESIDUAL OIL (1000 BBL) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | 3925. | 3120. | 2758. | 3876. | 6655. |
| INDUSTRIAL | NA | NA | NA | NA | NA | 1403. | 1341. | 1328. | 1840. | 4001. |
| COMMERCIAL | NA | NA | NA | NA | NA | 130. | 221. | 354. | 214. | 2129. |
| DISTILLATE OIL (1000 BBL) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | 122. | 97. | 86. | 131. | 203. |
| INDUSTRIAL | NA | NA | NA | NA | NA | 113. | 108. | 107. | 116. | 383. |
| COMMERCIAL -RESIDENTIAL | NA | NA | NA | NA | NA | 134. | 228. | 366. | 751. | 1302. |
| NATURAL GAS (10E6 CU. FT.) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | 0. | 0. | 0. | NA | NA | 2620. |
| INDUSTRIAL | NA | NA | 0. | 0. | 0. | 0. | 0. | 831. | 1281. | 6794. |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | 0. | 0. | 0. | 0. | 0. | 107. | 200. | 537. |
| WOOD (1000 TONS) | | | | | | | | | | |
| ALL USES | 3188. | 3029. | 2901. | 2774. | 2646. | 2519. | 2391. | 2296. | 2232. | 2072. |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE(1000 GAL) | NA | NA | NA | NA | NA | 202046. | 218691. | 251326. | 377489. | 349341. |
| DIESEL (1000 GAL.) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL(1000 TONS) | 324. | 654. | 1053. | 1435. | 1763. | 1547. | 1404. | 1156. | 1333. | 2017. |
| RAILROADS-OIL(1000 BBL) | NA | NA | NA | NA | NA | 1155. | 1086. | 890. | 1001. | 1537. |
| COKE PL (1000 TONS COAL) | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| VES FUEL OIL (1000 BBL) | NA | NA | NA | NA | NA | 2303. | 2734. | 2166. | 1842. | 1162. |
| CEMENT PL (1000 TONS) | 0. | 0. | 0. | 0. | 0. | 0. | NA | NA | NA | NA |

TABLE 2. FUEL CONSUMPTION 1950-1980 FOR THE STATE OF FLORIDA

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL(1000 TONS) | | | | | | | | |
| ELECTRIC UTILITIES | 0. | 175. | 1104. | 2323. | 5127. | 5451. | 4998. | 6980. |
| INDUSTRIAL BOILERS | 0. | 194. | 229. | 132. | 129. | 18. | 250. | 788. |
| COMMERCIAL-RESIDENTIAL | 279. | 176. | 115. | 58. | 20. | 0. | 0. | 10. |
| ANTHRACITE COAL (1000 TONS) | | | | | | | | |
| ALL USES | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| RESIDUAL OIL (1000 BBL) | | | | | | | | |
| ELECTRIC UTILITIES | 9912. | 16755. | 12550. | 27685. | 43335. | 67433. | 72856. | 70135. |
| INDUSTRIAL | 4592. | 10187. | 10849. | 8517. | 6925. | 6672. | 11654. | 13465. |
| COMMERCIAL | 516. | 2303. | 979. | 342. | 1829. | 1036. | 2513. | 1678. |
| DISTILLATE OIL (1000 BBL) | | | | | | | | |
| ELECTRIC UTILITIES | 531. | 942. | 576. | 375. | 662. | 5332. | 4101. | 2533. |
| INDUSTRIAL | 545. | 674. | 607. | 1676. | 1333. | 1349. | 3050. | 2480. |
| COMMERCIAL-RESIDENTIAL | 2621. | 4693. | 5764. | 6967. | 7054. | 5789. | 6166. | 3987. |
| NATURAL GAS (10E6 CU. FT.) | | | | | | | | |
| ELECTRIC UTILITIES | 5255. | 7935. | 88518. | 79052. | 198273. | 141153. | 158042. | 166047. |
| INDUSTRIAL | 11255. | 24186. | 36677. | 88461. | 92334. | 83364. | 96846. | 93275. |
| PIPELINES | 0. | 0. | 1000. | 2529. | 4593. | 8624. | 6451. | 11950. |
| COMMERCIAL-RESIDENTIAL | 1093. | 2216. | 13359. | 20866. | 41616. | 46954. | 57005. | 45316. |
| WOOD (1000 TONS) | | | | | | | | |
| ELECTRIC UTILITIES | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| INDUSTRIAL | 1083. | 1285. | 1384. | 1793. | 2347. | 2196. | 2941. | 3092. |
| COMMERCIAL | 16. | 12. | 10. | 6. | 8. | 11. | 13. | 15. |
| RESIDENTIAL | 814. | 627. | 507. | 340. | 434. | 559. | 708. | 785. |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE (1000 GAL.) | 719683. | 1194380. | 1765819. | 2291031. | NA | NA | NA | 0. |
| DIESEL (1000 GAL.) | 28224. | 31626. | 25158. | 60480. | 175266. | 302442. | 372792. | 491568. |
| RURAL VMT (10E6 MILES) | NA | NA | NA | NA | 18435. | 25785. | 24674. | 27316. |
| URBAN VMT (10E6 MILES) | NA | NA | NA | NA | 23346. | 35930. | 46763. | 51686. |
| OTHER | | | | | | | | |
| RAILROADS-COAL(1000 TONS) | 1108. | 345. | 70. | 0. | 0. | 0. | 0. | 0. |
| -OIL(1000 BBL) | 1723. | 2506. | 2090. | 2459. | 2954. | 1543. | 1934. | 1944. |
| COKE PLANTS (1000 TONS COAL) | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| VESSELS-DISTILLATE(1000 BBL) | 68. | 125. | 122. | 103. | 93. | 182. | 828. | 558. |
| -RESIDUAL(1000 BBL) | 212. | 412. | 545. | 441. | 517. | 543. | 984. | 2859. |
| OFF HIGHWAY DIESEL (1000 BBL) | 613. | 917. | 1409. | 1196. | 1595. | 1705. | 2287. | 1082. |
| CEMENT PLANT (1000 TONS) | 707. | 1376. | 1589. | 1630. | 1128. | 1676. | 2990. | 3336. |

TABLE 1. FUEL CONSUMPTION 1900-1945 FOR THE STATE OF GEORGIA

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL(1000 TONS) | | | | | | | | | | |
| ELECTRIC UTILITIES | 54. | 90. | 123. | 164. | 165. | 119. | 100. | 92. | 178. | 305. |
| INDUSTRIAL BOILERS | 570. | 787. | 986. | 1184. | 1348. | 1592. | 1284. | 880. | 806. | 718. |
| COMMERCIAL-RESIDENTIAL | 459. | 663. | 873. | 1160. | 1221. | 1393. | 1419. | 1034. | 958. | 1166. |
| ANTHRACITE COAL (1000 TONS) | | | | | | | | | | |
| ALL USES | 33. | 44. | 48. | 50. | 50. | 38. | NA | NA | NA | NA |
| RESIDUAL OIL (1000 BBL) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | 514. | 408. | 361. | 389. | 443. |
| INDUSTRIAL | NA | NA | NA | NA | NA | 671. | 641. | 635. | 913. | 1386. |
| COMMERCIAL | NA | NA | NA | NA | NA | 64. | 108. | 174. | 99. | 331. |
| DISTILLATE OIL (1000 BBL) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | 16. | 12. | 11. | 18. | 65. |
| INDUSTRIAL | NA | NA | NA | NA | NA | 29. | 27. | 27. | 76. | 155. |
| COMMERCIAL -RESIDENTIAL | NA | NA | NA | NA | NA | 90. | 153. | 245. | 405. | 745. |
| NATURAL GAS (10E6 CU. FT.) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | NA | NA | 3245. | 4745. | 13707. |
| INDUSTRIAL | NA | NA | 0. | 0. | 0. | 0. | 329. | 4716. | 7271. | 24314. |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | 0. | 0. | 0. | 0. | 1168. | 4578. | 8535. | 11601. |
| WOOD (1000 TONS) | | | | | | | | | | |
| ALL USES | 8192. | 7782. | 7454. | 7127. | 6799. | 6471. | 6144. | 5898. | 5734. | 5325. |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE(1000 GAL) | NA | NA | NA | NA | NA | 133548. | 213089. | 254609. | 374300. | 367726. |
| DIESEL (1000 GAL.) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL(1000 TONS) | 1013. | 1454. | 1803. | 1991. | 2270. | 1992. | 1808. | 1489. | 1717. | 2597. |
| RAILROADS-OIL(1000 BBL) | NA | NA | NA | NA | NA | 55. | 51. | 42. | 59. | 188. |
| COKE PL (1000 TONS COAL) | 35. | 43. | 56. | 56. | 46. | 12. | 0. | 0. | 0. | 0. |
| VES FUEL OIL (1000 BBL) | NA | NA | NA | NA | NA | 247. | 293. | 232. | 239. | 728. |
| CEMENT PL (1000 TONS) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

TABLE 2. FUEL CONSUMPTION 1950-1980 FOR THE STATE OF GEORGIA

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL(1000 TONS) | | | | | | | | |
| ELECTRIC UTILITIES | 855. | 1590. | 2608. | 5291. | 7473. | 14619. | 16556. | 19530. |
| INDUSTRIAL BOILERS | 0. | 425. | 501. | 438. | 361. | 365. | 619. | 761. |
| COMMERCIAL-RESIDENTIAL | 650. | 409. | 268. | 134. | 104. | 34. | 5. | 22. |
| ANTHRACITE COAL (1000 TONS) | | | | | | | | |
| ALL USES | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| RESIDUAL OIL (1000 BBL) | | | | | | | | |
| ELECTRIC UTILITIES | 871. | 422. | 37. | 52. | 1536. | 2251. | 4320. | 128. |
| INDUSTRIAL | 2540. | 3243. | 4605. | 5771. | 6620. | 4355. | 5136. | 5330. |
| COMMERCIAL | 366. | 804. | 72. | 505. | 1902. | 2068. | 2044. | 38. |
| DISTILLATE OIL (1000 BBL) | | | | | | | | |
| ELECTRIC UTILITIES | 235. | 0. | 0. | 0. | 69. | 2251. | 2264. | 774. |
| INDUSTRIAL | 355. | 345. | 468. | 1159. | 1060. | 1459. | 1834. | 1705. |
| COMMERCIAL-RESIDENTIAL | 2244. | 2896. | 2206. | 2293. | 2434. | 2098. | 2322. | 1221. |
| NATURAL GAS (10E6 CU. FT.) | | | | | | | | |
| ELECTRIC UTILITIES | 24299. | 34880. | 25337. | 695. | 58674. | 40282. | 5881. | 3666. |
| INDUSTRIAL | 44709. | 88523. | 79840. | 118447. | 140891. | 145479. | 112317. | 155158. |
| PIPELINES | 122. | 0. | 3545. | 4761. | 6876. | 4176. | 3440. | 7374. |
| COMMERCIAL-RESIDENTIAL | 23063. | 44521. | 77239. | 93219. | 126085. | 136622. | 156643. | 204979. |
| WOOD (1000 TONS) | | | | | | | | |
| ELECTRIC UTILITIES | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| INDUSTRIAL | 1646. | 1952. | 2103. | 2925. | 3310. | 3656. | 4812. | 4969. |
| COMMERCIAL | 61. | 47. | 38. | 26. | 16. | 17. | 18. | 19. |
| RESIDENTIAL | 3208. | 2473. | 1999. | 1364. | 848. | 881. | 941. | 978. |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE (1000 GAL.) | 706796. | 1053372. | 1317842. | 1724043. | NA | NA | NA | NA |
| DIESEL (1000 GAL.) | 6384. | 8484. | 25116. | 98868. | 250950. | 313698. | 398706. | 443268. |
| RURAL VMT (10E6 MILES) | NA | NA | NA | NA | 16566. | 21990. | 26458. | 24232. |
| URBAN VMT (10E6 MILES) | NA | NA | NA | NA | 12964. | 17282. | 17849. | 18956. |
| OTHER | | | | | | | | |
| RAILROADS-COAL(1000 TONS) | 1427. | 443. | 90. | 0. | 0. | 0. | 0. | 0. |
| -OIL(1000 BBL) | 1221. | 1934. | 1772. | 1751. | 2218. | 2252. | 2259. | 2870. |
| COKE PLANTS (1000 TONS COAL) | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| VESSELS-DISTILLATE(1000 BBL) | 10. | 14. | 17. | 11. | 20. | 14. | 25. | 104. |
| -RESIDUAL(1000 BBL) | 104. | 267. | 330. | 153. | 37. | 97. | 120. | 743. |
| OFF HIGHWAY DIESEL (1000 BBL) | 406. | 425. | 777. | 1167. | 1360. | 721. | 1069. | 386. |
| CEMENT PLANT (1000 TONS) | 230. | 448. | 517. | 531. | 1853. | 843. | 1465. | 1227. |

TABLE 1. FUEL CONSUMPTION 1900-1945 FOR THE STATE OF IDAHO

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL(1000 TONS) | | | | | | | | | | |
| ELECTRIC UTILITIES | 0. | 1. | 1. | 1. | 1. | 0. | 0. | 0. | 0. | 1. |
| INDUSTRIAL BOILERS | 106. | 153. | 200. | 251. | 236. | 192. | 153. | 135. | 165. | 203. |
| COMMERCIAL-RESIDENTIAL | 136. | 206. | 283. | 394. | 421. | 480. | 544. | 477. | 537. | 804. |
| ANTHRACITE COAL (1000 TONS) | | | | | | | | | | |
| ALL USES | 0. | 0. | 0. | 0. | 0. | 0. | NA | NA | NA | NA |
| RESIDUAL OIL (1000 BBL) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | 4. | 3. | 3. | 3. | NA |
| INDUSTRIAL | NA | NA | NA | NA | NA | 68. | 65. | 64. | 58. | 178. |
| COMMERCIAL | NA | NA | NA | NA | NA | 8. | 14. | 22. | 11. | 1. |
| DISTILLATE OIL (1000 BBL) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | 6. | 5. | 4. | NA | 4. |
| INDUSTRIAL | NA | NA | NA | NA | NA | 32. | 30. | 30. | 14. | 51. |
| COMMERCIAL -RESIDENTIAL | NA | NA | NA | NA | NA | 28. | 48. | 77. | 92. | 172. |
| NATURAL GAS (10E6 CU. FT.) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | NA | NA | 0. | 0. | 0. |
| INDUSTRIAL | NA | NA | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| WOOD (1000 TONS) | | | | | | | | | | |
| ALL USES | 1312. | 1246. | 1194. | 1141. | 1089. | 1036. | 984. | 944. | 918. | 853. |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE(1000 GAL) | NA | NA | NA | NA | NA | 31010. | 54792. | 65981. | 97510. | 95986. |
| DIESEL (1000 GAL.) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL(1000 TONS) | 525. | 793. | 1031. | 1192. | 1312. | 1055. | 879. | 665. | 699. | 952. |
| RAILROADS-OIL(1000 BBL) | NA | NA | NA | NA | NA | 370. | 348. | 285. | 324. | 471. |
| COKE PL (1000 TONS COAL) | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| VES FUEL OIL (1000 BBL) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CEMENT PL (1000 TONS) | 0. | 0. | 0. | 0. | 0. | 0. | NA | NA | NA | NA |

TABLE 2. FUEL CONSUMPTION 1950-1980 FOR THE STATE OF IDAHO

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL(1000 TONS) | | | | | | | | |
| ELECTRIC UTILITIES | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| INDUSTRIAL BOILERS | 297. | 278. | 243. | 472. | 167. | 388. | 365. | 412. |
| COMMERCIAL-RESIDENTIAL | 572. | 360. | 279. | 207. | 216. | 125. | 56. | 113. |
| ANTHRACITE COAL (1000 TONS) | | | | | | | | |
| ALL USES | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| RESIDUAL OIL (1000 BBL) | | | | | | | | |
| ELECTRIC UTILITIES | 0. | 0. | 0. | 1. | 0. | 0. | 0. | 0. |
| INDUSTRIAL | 382. | 512. | 41. | 117. | 116. | 109. | 458. | 126. |
| COMMERCIAL | 26. | 542. | 102. | 172. | 118. | 576. | 534. | 488. |
| DISTILLATE OIL (1000 BBL) | | | | | | | | |
| ELECTRIC UTILITIES | 8. | 1. | 0. | 0. | 1. | 8. | 2. | 0. |
| INDUSTRIAL | 1610. | 264. | 344. | 444. | 531. | 812. | 783. | 600. |
| COMMERCIAL-RESIDENTIAL | 367. | 863. | 2559. | 3114. | 3107. | 3417. | 3797. | 894. |
| NATURAL GAS (10E6 CU. FT.) | | | | | | | | |
| ELECTRIC UTILITIES | 0. | 0. | 0. | 0. | 0. | 18. | 38. | 182591. |
| INDUSTRIAL | 0. | 0. | 16092. | 20788. | 28805. | 29898. | 26429. | 31646. |
| PIPELINES | 0. | 0. | 489. | 1058. | 4203. | 4231. | 4418. | 4205. |
| COMMERCIAL-RESIDENTIAL | 0. | 0. | 4975. | 9951. | 13562. | 26266. | 13303. | 13143. |
| WOOD (1000 TONS) | | | | | | | | |
| ELECTRIC UTILITIES | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| INDUSTRIAL | 259. | 307. | 331. | 366. | 494. | 456. | 716. | 686. |
| COMMERCIAL | 10. | 7. | 6. | 4. | 3. | 4. | 5. | 7. |
| RESIDENTIAL | 518. | 400. | 323. | 232. | 170. | 186. | 271. | 378. |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE (1000 GAL.) | 175434. | 222538. | 257435. | 304687. | NA | NA | NA | NA |
| DIESEL (1000 GAL.) | 16464. | 16506. | 13440. | 29652. | 29064. | 46284. | 68796. | 54306. |
| RURAL VMT (10E6 MILES) | NA | NA | NA | NA | 3586. | 4051. | 4824. | 4834. |
| URBAN VMT (10E6 MILES) | NA | NA | NA | NA | 1155. | 1822. | 2864. | 2109. |
| OTHER | | | | | | | | |
| RAILROADS-COAL(1000 TONS) | 519. | 169. | 35. | 17. | 8. | 0. | 0. | 0. |
| -OIL(1000 BBL) | 311. | 587. | 255. | 329. | 694. | 1007. | 1094. | 1250. |
| COKE PLANTS (1000 TONS COAL) | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| VESSELS-DISTILLATE(1000 BBL) | 0. | 0. | 1. | 0. | 0. | 0. | 0. | 0. |
| -RESIDUAL(1000 BBL) | 0. | 0. | 7. | 0. | 0. | 0. | 0. | 0. |
| OFF HIGHWAY DIESEL (1000 BBL) | 79. | 274. | 604. | 733. | 690. | 832. | 986. | 474. |
| CEMENT PLANT (1000 TONS) | 76. | 104. | 98. | 135. | 161. | 191. | 201. | 190. |

TABLE 1. FUEL CONSUMPTION 1900-1945 FOR THE STATE OF ILLINOIS

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL(1000 TONS) | | | | | | | | | | |
| ELECTRIC UTILITIES | 1178. | 1952. | 2668. | 3560. | 4540. | 5900. | 5897. | 4132. | 6369. | 9003. |
| INDUSTRIAL BOILERS | 11107. | 14865. | 18004. | 20884. | 19881. | 17760. | 14183. | 11818. | 13548. | 15845. |
| COMMERCIAL-RESIDENTIAL | 5717. | 7996. | 10198. | 13122. | 13627. | 15544. | 17383. | 14909. | 16456. | 24252. |
| ANTHRACITE COAL (1000 TONS) | | | | | | | | | | |
| ALL USES | 2149. | 2911. | 3140. | 3292. | 3321. | 2480. | 211. | 159. | 265. | 530. |
| RESIDUAL OIL (1000 BBL) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | 105. | 84. | 74. | 111. | 123. |
| INDUSTRIAL | NA | NA | NA | NA | NA | 5527. | 5283. | 5230. | 5064. | 9284. |
| COMMERCIAL | NA | NA | NA | NA | NA | 66. | 112. | 180. | 148. | 237. |
| DISTILLATE OIL (1000 BBL) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | 165. | 131. | 116. | 133. | 179. |
| INDUSTRIAL | NA | NA | NA | NA | NA | 597. | 571. | 565. | 705. | 1311. |
| COMMERCIAL -RESIDENTIAL | NA | NA | NA | NA | NA | 231. | 393. | 630. | 1606. | 2511. |
| NATURAL GAS (10E6 CU. FT.) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | 0. | 0. | 0. | 2274. | 3326. | 1657. |
| INDUSTRIAL | NA | NA | 5457. | 1986. | 2625. | 3915. | 9487. | 39118. | 60314. | 89252. |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | 1266. | 705. | 388. | 250. | 115. | 13114. | 24448. | 32114. |
| WOOD (1000 TONS) | | | | | | | | | | |
| ALL USES | 3552. | 3374. | 3232. | 3090. | 2948. | 2806. | 2664. | 2557. | 2486. | 2309. |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE(1000 GAL) | NA | NA | NA | NA | NA | 560306. | 937790. | 1022648. | 1419805. | 1105736. |
| DIESEL (1000 GAL.) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL(1000 TONS) | 4830. | 6722. | 8063. | 8595. | 9318. | 7726. | 6643. | 5198. | 5816. | 8651. |
| RAILROADS-OIL(1000 BBL) | NA | NA | NA | NA | NA | 821. | 772. | 633. | 649. | 1327. |
| COKE PL (1000 TONS COAL) | 1761. | 2090. | 2647. | 2530. | 3433. | 3928. | 4060. | 2730. | 4064. | 4370. |
| VES FUEL OIL (1000 BBL) | NA | NA | NA | NA | NA | 319. | 379. | 300. | 180. | 244. |
| CEMENT PL (1000 TONS) | 45. | 291. | 838. | 969. | 1041. | 1335. | 1492. | 633. | 935. | 821. |

TABLE 2. FUEL CONSUMPTION 1950-1980 FOR THE STATE OF ILLINOIS

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL(1000 TONS) | | | | | | | | |
| ELECTRIC UTILITIES | 11689. | 17286. | 19218. | 25047. | 29453. | 34853. | 33194. | 36508. |
| INDUSTRIAL BOILERS | 10834. | 10126. | 12857. | 14168. | 6579. | 3494. | 3165. | 3391. |
| COMMERCIAL-RESIDENTIAL | 14426. | 9073. | 6368. | 3943. | 2590. | 507. | 210. | 154. |
| ANTHRACITE COAL (1000 TONS) | | | | | | | | |
| ALL USES | 199. | 110. | 92. | 121. | 107. | 34. | 67. | 63. |
| RESIDUAL OIL (1000 BBL) | | | | | | | | |
| ELECTRIC UTILITIES | 870. | 103. | 105. | 123. | 3942. | 5450. | 11765. | 12853. |
| INDUSTRIAL | 11724. | 13207. | 12046. | 8051. | 9307. | 10819. | 11488. | 12480. |
| COMMERCIAL | 208. | 1015. | 12501. | 13421. | 14552. | 11390. | 6649. | 2909. |
| DISTILLATE OIL (1000 BBL) | | | | | | | | |
| ELECTRIC UTILITIES | 443. | 203. | 237. | 162. | 2717. | 5347. | 7318. | 970. |
| INDUSTRIAL | 3044. | 3425. | 1733. | 3146. | 2810. | 2798. | 3959. | 2591. |
| COMMERCIAL-RESIDENTIAL | 5340. | 6033. | 33550. | 29335. | 24907. | 24194. | 28551. | 6390. |
| NATURAL GAS (10E6 CU. FT.) | | | | | | | | |
| ELECTRIC UTILITIES | 33852. | 55525. | 42348. | 32919. | 132329. | 34176. | 22568. | 19165. |
| INDUSTRIAL | 149245. | 234731. | 197967. | 249795. | 380464. | 352291. | 366548. | 348939. |
| PIPELINES | 7624. | 9062. | 10068. | 13372. | 27973. | 14226. | 13261. | 14564. |
| COMMERCIAL-RESIDENTIAL | 78342. | 154925. | 279370. | 470980. | 643233. | 694320. | 772420. | 706667. |
| WOOD (1000 TONS) | | | | | | | | |
| ELECTRIC UTILITIES | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| INDUSTRIAL | 727. | 862. | 929. | 1277. | 1535. | 1613. | 2296. | 2132. |
| COMMERCIAL | 26. | 20. | 16. | 12. | 14. | 15. | 24. | 32. |
| RESIDENTIAL | 1378. | 1062. | 859. | 640. | 737. | 792. | 1261. | 1704. |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE (1000 GAL.) | 2044122. | 2551090. | 3016385. | 3649763. | NA | NA | NA | NA |
| DIESEL (1000 GAL.) | 29316. | 53256. | 49854. | 167202. | 392028. | 506352. | 622902. | 600936. |
| RURAL VMT (10E6 MILES) | NA | NA | NA | NA | 19530. | 20186. | 22028. | 21922. |
| URBAN VMT (10E6 MILES) | NA | NA | NA | NA | 35783. | 40757. | 43799. | 43164. |
| OTHER | | | | | | | | |
| RAILROADS-COAL(1000 TONS) | 3732. | 757. | 91. | 0. | 0. | 0. | 0. | 0. |
| -OIL(1000 BBL) | 4447. | 4737. | 8023. | 6974. | 7494. | 8065. | 6447. | 7282. |
| COKE PLANTS (1000 TONS COAL) | 5124. | 4323. | 2874. | 3607. | 3688. | 3094. | 2132. | 2052. |
| VESSELS-DISTILLATE(1000 BBL) | 80. | 97. | 76. | 135. | 143. | 202. | 129. | 62. |
| -RESIDUAL(1000 BBL) | 64. | 49. | 13. | 3. | 21. | 9. | 8. | 0. |
| OFF HIGHWAY DIESEL (1000 BBL) | 162. | 499. | 1327. | 1674. | 1218. | 1089. | 922. | 1281. |
| CEMENT PLANT (1000 TONS) | 1490. | 1656. | 1743. | 1736. | 1391. | 1481. | 2123. | 1768. |

TABLE 1. FUEL CONSUMPTION 1900-1945 FOR THE STATE OF INDIANA

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL(1000 TONS) | | | | | | | | | | |
| ELECTRIC UTILITIES | 582. | 963. | 1317. | 1757. | 2067. | 2321. | 2338. | 1835. | 3150. | 4936. |
| INDUSTRIAL BOILERS | 3241. | 4747. | 6284. | 7962. | 9474. | 11530. | 10009. | 7779. | 8313. | 9054. |
| COMMERCIAL-RESIDENTIAL | 1536. | 2350. | 3269. | 4572. | 4906. | 5596. | 6179. | 5193. | 5627. | 8150. |
| ANTHRACITE COAL (1000 TONS) | | | | | | | | | | |
| ALL USES | 392. | 531. | 572. | 600. | 605. | 452. | 66. | 50. | 84. | 87. |
| RESIDUAL OIL (1000 BBL) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | 235. | 187. | 165. | 125. | 269. |
| INDUSTRIAL | NA | NA | NA | NA | NA | 5675. | 5424. | 5370. | 6709. | 10686. |
| COMMERCIAL | NA | NA | NA | NA | NA | 12. | 21. | 34. | 68. | 71. |
| DISTILLATE OIL (1000 BBL) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | 110. | 87. | 77. | 70. | 161. |
| INDUSTRIAL | NA | NA | NA | NA | NA | 229. | 219. | 217. | 290. | 580. |
| COMMERCIAL -RESIDENTIAL | NA | NA | NA | NA | NA | 40. | 68. | 109. | 414. | 623. |
| NATURAL GAS (10E6 CU. FT.) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | 0. | 0. | 1. | 5880. | 8599. | 3968. |
| INDUSTRIAL | NA | NA | 1445. | 1014. | 1733. | 1039. | 1537. | 10698. | 16494. | 31669. |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | 4315. | 3505. | 2702. | 747. | 978. | 2211. | 4121. | 8605. |
| WOOD (1000 TONS) | | | | | | | | | | |
| ALL USES | 3030. | 2879. | 2757. | 2636. | 2515. | 2394. | 2273. | 2182. | 2121. | 1970. |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE(1000 GAL) | NA | NA | NA | NA | NA | 276848. | 429960. | 473378. | 642589. | 587894. |
| DIESEL (1000 GAL.) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL(1000 TONS) | 2384. | 3631. | 4765. | 5560. | 6252. | 5184. | 4457. | 3489. | 3902. | 5805. |
| RAILROADS-OIL(1000 BBL) | NA | NA | NA | NA | NA | 67. | 63. | 52. | 65. | 311. |
| COKE PL (1000 TONS COAL) | 1863. | 2412. | 3367. | 3593. | 5412. | 6583. | 7375. | 5526. | 9207. | 11143. |
| VES FUEL OIL (1000 BBL) | NA | NA | NA | NA | NA | 263. | 312. | 247. | 145. | 392. |
| CEMENT PL (1000 TONS) | 6. | 588. | 1357. | 1531. | 2028. | NA | NA | NA | NA | NA |

TABLE 2. FUEL CONSUMPTION 1950-1980 FOR THE STATE OF INDIANA

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL(1000 TONS) | | | | | | | | |
| ELECTRIC UTILITIES | 6283. | 9820. | 13483. | 18113. | 22780. | 28715. | 27782. | 34026. |
| INDUSTRIAL BOILERS | 5170. | 4832. | 3607. | 4646. | 6107. | 3545. | 5007. | 4650. |
| COMMERCIAL-RESIDENTIAL | 5250. | 3302. | 2113. | 1080. | 826. | 596. | 45. | 221. |
| ANTHRACITE COAL (1000 TONS) | | | | | | | | |
| ALL USES | 0. | 0. | 45. | 83. | 69. | 20. | 13. | 2. |
| RESIDUAL OIL (1000 BBL) | | | | | | | | |
| ELECTRIC UTILITIES | 112. | 81. | 183. | 107. | 212. | 0. | 0. | 0. |
| INDUSTRIAL | 14177. | 12758. | 10345. | 10172. | 6838. | 8567. | 11609. | 11984. |
| COMMERCIAL | 126. | 45. | 1973. | 1720. | 2350. | 5912. | 7219. | 2509. |
| DISTILLATE OIL (1000 BBL) | | | | | | | | |
| ELECTRIC UTILITIES | 444. | 218. | 126. | 57. | 261. | 1928. | 4016. | 835. |
| INDUSTRIAL | 2538. | 4075. | 3191. | 2975. | 2269. | 2517. | 3743. | 2112. |
| COMMERCIAL-RESIDENTIAL | 3592. | 4187. | 21245. | 19890. | 18704. | 17771. | 19839. | 7883. |
| NATURAL GAS (10E6 CU. FT.) | | | | | | | | |
| ELECTRIC UTILITIES | 1066. | 6564. | 8790. | 14257. | 29571. | 10994. | 3143. | 1904. |
| INDUSTRIAL | 33582. | 68431. | 106543. | 180134. | 268394. | 223383. | 194391. | 244729. |
| PIPELINES | 3377. | 3977. | 5002. | 8033. | 11154. | 9605. | 4870. | 8901. |
| COMMERCIAL-RESIDENTIAL | 21661. | 54489. | 96045. | 156616. | 236249. | 233359. | 238551. | 233713. |
| WOOD (1000 TONS) | | | | | | | | |
| ELECTRIC UTILITIES | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| INDUSTRIAL | 355. | 421. | 453. | 597. | 683. | 887. | 1306. | 1297. |
| COMMERCIAL | 27. | 21. | 17. | 13. | 13. | 12. | 21. | 30. |
| RESIDENTIAL | 1436. | 1107. | 895. | 674. | 659. | 654. | 1119. | 1566. |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE (1000 GAL.) | 1080865. | 1495236. | 1720858. | 2053563. | NA | NA | NA | NA |
| DIESEL (1000 GAL.) | 24990. | 28686. | 46368. | 109074. | 233352. | 345660. | 384132. | 569142. |
| RURAL VMT (10E6 MILES) | NA | NA | NA | NA | 19761. | 18600. | 19347. | 20505. |
| URBAN VMT (10E6 MILES) | NA | NA | NA | NA | 12817. | 18759. | 23115. | 37110. |
| OTHER | | | | | | | | |
| RAILROADS-COAL(1000 TONS) | 2504. | 508. | 61. | 0. | 0. | 0. | 0. | 0. |
| -OIL(1000 BBL) | 814. | 2573. | 2868. | 2476. | 2708. | 2526. | 2805. | 3908. |
| COKE PLANTS (1000 TONS COAL) | 11201. | 13240. | 11155. | 11997. | 12672. | 14072. | 10738. | 11684. |
| VESSELS-DISTILLATE(1000 BBL) | 5. | 24. | 14. | 12. | 24. | 48. | 17. | 20. |
| -RESIDUAL(1000 BBL) | 72. | 15. | 40. | 67. | 48. | 71. | 42. | 32. |
| OFF HIGHWAY DIESEL (1000 BBL) | 202. | 459. | 659. | 894. | 1800. | 877. | 689. | 617. |
| CEMENT PLANT (1000 TONS) | 1880. | 2458. | 2756. | 2847. | 2823. | 2782. | 2567. | 2033. |

TABLE 1. FUEL CONSUMPTION 1900-1945 FOR THE STATE OF IOWA

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL(1000 TONS) | | | | | | | | | | |
| ELECTRIC UTILITIES | 285. | 472. | 645. | 861. | 971. | 997. | 867. | 576. | 836. | 1103. |
| INDUSTRIAL BOILERS | 2818. | 3615. | 4174. | 4585. | 4004. | 3089. | 2261. | 1869. | 2126. | 2469. |
| COMMERCIAL-RESIDENTIAL | 2018. | 2704. | 3290. | 4019. | 4082. | 4656. | 4865. | 3722. | 3656. | 4780. |
| ANTHRACITE COAL (1000 TONS) | | | | | | | | | | |
| ALL USES | 202. | 274. | 296. | 310. | 313. | 234. | NA | NA | NA | NA |
| RESIDUAL OIL (1000 BBL) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | 250. | 199. | 176. | 152. | 266. |
| INDUSTRIAL | NA | NA | NA | NA | NA | 162. | 155. | 153. | 36. | 136. |
| COMMERCIAL | NA | NA | NA | NA | NA | 17. | 29. | 47. | 53. | 8. |
| DISTILLATE OIL (1000 BBL) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | 148. | 118. | 104. | 157. | 344. |
| INDUSTRIAL | NA | NA | NA | NA | NA | 55. | 53. | 52. | 55. | 72. |
| COMMERCIAL -RESIDENTIAL | NA | NA | NA | NA | NA | 78. | 133. | 213. | 705. | 1478. |
| NATURAL GAS (10E6 CU. FT.) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | 0. | 0. | 0. | 3733. | 5459. | 5975. |
| INDUSTRIAL | NA | NA | NA | NA | NA | 0. | 0. | 7457. | 11497. | 18747. |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | 0. | 0. | 1. | NA | NA | 3489. | 6504. | 9047. |
| WOOD (1000 TONS) | | | | | | | | | | |
| ALL USES | 728. | 692. | 663. | 634. | 605. | 575. | 546. | 524. | 510. | 473. |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE(1000 GAL) | NA | NA | NA | NA | NA | 225530. | 358401. | 387053. | 490454. | 430335. |
| DIESEL (1000 GAL.) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL(1000 TONS) | 1787. | 2385. | 2726. | 2748. | 2854. | 2296. | 1913. | 1449. | 1521. | 2072. |
| RAILROADS-OIL(1000 BBL) | NA | NA | NA | NA | NA | 78. | 73. | 60. | 221. | 815. |
| COKE PL (1000 TONS COAL) | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| VES FUEL OIL (1000 BBL) | NA | NA | NA | NA | NA | NA | NA | NA | NA | 4. |
| CEMENT PL (1000 TONS) | 0. | 0. | NA | 857. | 911. | 874. | 1332. | 662. | 866. | 601. |

TABLE 2. FUEL CONSUMPTION 1950-1980 FOR THE STATE OF IOWA

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL(1000 TONS) | | | | | | | | |
| ELECTRIC UTILITIES | 1726. | 1612. | 2118. | 2760. | 4190. | 5560. | 9268. | 10995. |
| INDUSTRIAL BOILERS | 1760. | 1645. | 1964. | 2397. | 1759. | 1089. | 1329. | 1483. |
| COMMERCIAL-RESIDENTIAL | 2896. | 1822. | 910. | 490. | 210. | 92. | 62. | 90. |
| ANTHRACITE COAL (1000 TONS) | | | | | | | | |
| ALL USES | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 33. |
| RESIDUAL OIL (1000 BBL) | | | | | | | | |
| ELECTRIC UTILITIES | 104. | 25. | 10. | 27. | 57. | 0. | 0. | 14. |
| INDUSTRIAL | 303. | 246. | 390. | 142. | 60. | 76. | 29. | 274. |
| COMMERCIAL | 47. | 62. | 383. | 303. | 160. | 325. | 559. | 79. |
| DISTILLATE OIL (1000 BBL) | | | | | | | | |
| ELECTRIC UTILITIES | 879. | 449. | 283. | 196. | 340. | 549. | 931. | 39. |
| INDUSTRIAL | 216. | 172. | 196. | 614. | 329. | 733. | 1257. | 771. |
| COMMERCIAL-RESIDENTIAL | 2056. | 2273. | 10516. | 8536. | 7210. | 5642. | 5751. | 3209. |
| NATURAL GAS (10E6 CU. FT.) | | | | | | | | |
| ELECTRIC UTILITIES | 17372. | 40317. | 48587. | 44395. | 77726. | 46929. | 8177. | 6834. |
| INDUSTRIAL | 34702. | 77648. | 48399. | 76183. | 99152. | 121489. | 95044. | 114523. |
| PIPELINES | 5594. | 6611. | 8921. | 11070. | 18299. | 16095. | 4931. | 12681. |
| COMMERCIAL-RESIDENTIAL | 25937. | 54402. | 86293. | 115961. | 153485. | 161285. | 130777. | 135543. |
| WOOD (1000 TONS) | | | | | | | | |
| ELECTRIC UTILITIES | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| INDUSTRIAL | 128. | 152. | 164. | 171. | 224. | 298. | 397. | 383. |
| COMMERCIAL | 6. | 5. | 4. | 2. | 2. | 3. | 3. | 3. |
| RESIDENTIAL | 303. | 234. | 189. | 126. | 115. | 134. | 156. | 170. |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE (1000 GAL.) | 739862. | 875371. | 993109. | 1140834. | NA | NA | NA | NA |
| DIESEL (1000 GAL.) | 8778. | 12180. | 25788. | 46704. | 165522. | 197484. | 258132. | 265104. |
| RURAL VMT (10E6 MILES) | NA | NA | NA | NA | 12115. | 11646. | 12833. | 12377. |
| URBAN VMT (10E6 MILES) | NA | NA | NA | NA | 6112. | 7987. | 6634. | 6594. |
| OTHER | | | | | | | | |
| RAILROADS-COAL(1000 TONS) | 1129. | 367. | 77. | 38. | 17. | 0. | 0. | 0. |
| -OIL(1000 BBL) | 2030. | 2827. | 1297. | 880. | 1250. | 1744. | 1326. | 1519. |
| COKE PLANTS (1000 TONS COAL) | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| VESSELS-DISTILLATE(1000 BBL) | 4. | 1. | 2. | 5. | 4. | 6. | 5. | 6. |
| -RESIDUAL(1000 BBL) | 1. | 4. | 0. | 0. | 0. | 0. | 0. | 0. |
| OFF HIGHWAY DIESEL (1000 BBL) | 176. | 215. | 758. | 1227. | 1824. | 1234. | 1176. | 312. |
| CEMENT PLANT (1000 TONS) | 1394. | 1914. | 2355. | 2552. | 2523. | 2208. | 2533. | 2058. |

TABLE 1. FUEL CONSUMPTION 1900-1945 FOR THE STATE OF KANSAS

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL(1000 TONS) | | | | | | | | | | |
| ELECTRIC UTILITIES | 119. | 196. | 269. | 358. | 403. | 412. | 347. | 217. | 294. | 353. |
| INDUSTRIAL BOILERS | 845. | 1066. | 1207. | 1293. | 1223. | 1160. | 879. | 635. | 623. | 612. |
| COMMERCIAL-RESIDENTIAL | 1342. | 1767. | 2107. | 2512. | 2523. | 2878. | 2848. | 1955. | 1668. | 1803. |
| ANTHRACITE COAL (1000 TONS) | | | | | | | | | | |
| ALL USES | 16. | 22. | 24. | 25. | 25. | 19. | NA | NA | NA | NA |
| RESIDUAL OIL (1000 BBL) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | 229. | 182. | 161. | 177. | 318. |
| INDUSTRIAL | NA | NA | NA | NA | NA | 2241. | 2142. | 2121. | 2811. | 2175. |
| COMMERCIAL | NA | NA | NA | NA | NA | 37. | 63. | 101. | 62. | 48. |
| DISTILLATE OIL (1000 BBL) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | 97. | 77. | 68. | 140. | 200. |
| INDUSTRIAL | NA | NA | NA | NA | NA | 49. | 46. | 46. | 48. | 152. |
| COMMERCIAL -RESIDENTIAL | NA | NA | NA | NA | NA | 96. | 164. | 263. | 361. | 855. |
| NATURAL GAS (10E6 CU. FT.) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | 2317. | 4844. | 12636. | 11873. | 17363. | 26089. |
| INDUSTRIAL | NA | NA | 58138. | 28242. | 19705. | 39037. | 45679. | 33403. | 51503. | 122757. |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | 23792. | 20630. | 13435. | 9647. | 17320. | 14969. | 27906. | 37649. |
| WOOD (1000 TONS) | | | | | | | | | | |
| ALL USES | 552. | 524. | 502. | 480. | 458. | 436. | 414. | 397. | 386. | 359. |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE(1000 GAL) | NA | NA | NA | NA | NA | 195414. | 304490. | 297247. | 349282. | 307523. |
| DIESEL (1000 GAL.) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL(1000 TONS) | 2279. | 2991. | 3349. | 3292. | 3378. | 2716. | 2263. | 1715. | 1799. | 2451. |
| RAILROADS-OIL(1000 BBL) | NA | NA | NA | NA | NA | 5531. | 5200. | 4262. | 4164. | 8284. |
| COKE PL (1000 TONS COAL) | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| VES FUEL OIL (1000 BBL) | NA | NA | NA | NA | NA | NA | NA | NA | 5. | NA |
| CEMENT PL (1000 TONS) | 15. | NA | 1063. | 673. | 816. | 1224. | 1130. | 439. | 645. | 565. |

TABLE 2. FUEL CONSUMPTION 1950-1980 FOR THE STATE OF KANSAS

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL(1000 TONS) | | | | | | | | |
| ELECTRIC UTILITIES | 408. | 409. | 435. | 478. | 1099. | 3220. | 7395. | 12499. |
| INDUSTRIAL BOILERS | 318. | 298. | 357. | 204. | 97. | 113. | 100. | 335. |
| COMMERCIAL-RESIDENTIAL | 405. | 255. | 176. | 35. | 0. | 0. | 3. | 5. |
| ANTHRACITE COAL (1000 TONS) | | | | | | | | |
| ALL USES | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| RESIDUAL OIL (1000 BBL) | | | | | | | | |
| ELECTRIC UTILITIES | 395. | 538. | 133. | 175. | 506. | 3650. | 3537. | 55. |
| INDUSTRIAL | 1759. | 2335. | 1733. | 532. | 488. | 1678. | 2767. | 1006. |
| COMMERCIAL | 23. | 27. | 195. | 129. | 237. | 568. | 325. | 0. |
| DISTILLATE OIL (1000 BBL) | | | | | | | | |
| ELECTRIC UTILITIES | 363. | 170. | 141. | 136. | 189. | 1820. | 1159. | 43. |
| INDUSTRIAL | 349. | 210. | 158. | 166. | 757. | 586. | 705. | 781. |
| COMMERCIAL-RESIDENTIAL | 940. | 1393. | 1065. | 2294. | 789. | 1347. | 2505. | 536. |
| NATURAL GAS (10E6 CU. FT.) | | | | | | | | |
| ELECTRIC UTILITIES | 39466. | 60071. | 82195. | 102536. | 168139. | 127818. | 118076. | 101022. |
| INDUSTRIAL | 168124. | 185710. | 135784. | 176231. | 163395. | 124378. | 143679. | 166298. |
| PIPELINES | 9332. | 34584. | 42763. | 49710. | 94211. | 96454. | 93648. | 76844. |
| COMMERCIAL-RESIDENTIAL | 65147. | 88734. | 114665. | 125265. | 149949. | 150077. | 163943. | 144174. |
| WOOD (1000 TONS) | | | | | | | | |
| ELECTRIC UTILITIES | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| INDUSTRIAL | 32. | 38. | 41. | 74. | 118. | 225. | 301. | 305. |
| COMMERCIAL | 5. | 4. | 3. | 2. | 2. | 2. | 3. | 3. |
| RESIDENTIAL | 294. | 226. | 183. | 119. | 93. | 108. | 132. | 149. |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE (1000 GAL.) | 549017. | 695222. | 804524. | 969978. | NA | NA | NA | NA |
| DIESEL (1000 GAL.) | 12684. | 16548. | 12012. | 37968. | 117348. | 138642. | 158802. | 228858. |
| RURAL VMT (10E6 MILES) | NA | NA | NA | NA | 8378. | 9328. | 10122. | 10121. |
| URBAN VMT (10E6 MILES) | NA | NA | NA | NA | 4988. | 6157. | 6951. | 7169. |
| OTHER | | | | | | | | |
| RAILROADS-COAL(1000 TONS) | 1336. | 434. | 91. | 45. | 20. | 0. | 0. | 0. |
| -OIL(1000 BBL) | 5231. | 4211. | 2811. | 2573. | 2418. | 2365. | 3586. | 4887. |
| COKE PLANTS (1000 TONS COAL) | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| VESSELS-DISTILLATE(1000 BBL) | 0. | 0. | 0. | 1. | 0. | 0. | 0. | 0. |
| -RESIDUAL(1000 BBL) | 0. | 0. | 3. | 0. | 0. | 1. | 0. | 0. |
| OFF HIGHWAY DIESEL (1000 BBL) | 208. | 233. | 693. | 875. | 1529. | 1818. | 2628. | 502. |
| CEMENT PLANT (1000 TONS) | 1620. | 1733. | 1503. | 1669. | 1687. | 1835. | 2063. | 1968. |

TABLE 1. FUEL CONSUMPTION 1900-1945 FOR THE STATE OF KENTUCKY

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL(1000 TONS) | | | | | | | | | | |
| ELECTRIC UTILITIES | 163. | 270. | 370. | 493. | 571. | 621. | 706. | 657. | 1279. | 2207. |
| INDUSTRIAL BOILERS | 1279. | 1658. | 1941. | 2165. | 2398. | 2846. | 2527. | 2069. | 2332. | 2684. |
| COMMERCIAL-RESIDENTIAL | 1234. | 1673. | 2062. | 2556. | 2613. | 2981. | 3123. | 2400. | 2371. | 3121. |
| ANTHRACITE COAL (1000 TONS) | | | | | | | | | | |
| ALL USES | 13. | 18. | 19. | 20. | 20. | 15. | NA | NA | NA | NA |
| RESIDUAL OIL (1000 BBL) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | NA | NA | NA | NA | 3. |
| INDUSTRIAL | NA | NA | NA | NA | NA | 362. | 346. | 343. | 524. | 558. |
| COMMERCIAL | NA | NA | NA | NA | NA | 4. | 7. | 12. | 42. | 49. |
| DISTILLATE OIL (1000 BBL) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | 19. | 15. | 13. | 40. | 78. |
| INDUSTRIAL | NA | NA | NA | NA | NA | 72. | 69. | 68. | 75. | 286. |
| COMMERCIAL -RESIDENTIAL | NA | NA | NA | NA | NA | 41. | 70. | 112. | 189. | 370. |
| NATURAL GAS (10E6 CU. FT.) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDUSTRIAL | NA | NA | 2384. | 2822. | 5766. | 7416. | 5292. | 4334. | 6682. | 10583. |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | 2574. | 4924. | 9531. | 11185. | 10674. | 6544. | 12199. | 16219. |
| WOOD (1000 TONS) | | | | | | | | | | |
| ALL USES | 2907. | 2761. | 2645. | 2529. | 2413. | 2296. | 2180. | 2093. | 2035. | 1889. |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE(1000 GAL) | NA | NA | NA | NA | NA | 96482. | 160476. | 193516. | 283830. | 268962. |
| DIESEL (1000 GAL.) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL(1000 TONS) | 1204. | 1624. | 1881. | 1927. | 2127. | 1867. | 1694. | 1395. | 1608. | 2433. |
| RAILROADS-OIL(1000 BBL) | NA | NA | NA | NA | NA | 56. | 52. | 43. | 127. | 309. |
| COKE PL (1000 TONS COAL) | 836. | 964. | 1178. | 1074. | 851. | 224. | 108. | 208. | 544. | 882. |
| VES FUEL OIL (1000 BBL) | NA | NA | NA | NA | NA | 141. | 168. | 133. | 121. | 183. |
| CEMENT PL (1000 TONS) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

TABLE 2. FUEL CONSUMPTION 1950-1980 FOR THE STATE OF KENTUCKY

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL(1000 TONS) | | | | | | | | |
| ELECTRIC UTILITIES | 1592. | 5503. | 7466. | 12210. | 19108. | 25724. | 24068. | 24963. |
| INDUSTRIAL BOILERS | 2223. | 2078. | 1812. | 2420. | 2371. | 1328. | 1636. | 1952. |
| COMMERCIAL-RESIDENTIAL | 1737. | 1093. | 677. | 450. | 602. | 157. | 134. | 266. |
| ANTHRACITE COAL (1000 TONS) | | | | | | | | |
| ALL USES | 0. | 0. | 41. | 61. | 0. | 0. | 0. | 95. |
| RESIDUAL OIL (1000 BBL) | | | | | | | | |
| ELECTRIC UTILITIES | 12. | 1. | 0. | 12. | 121. | 0. | 0. | 0. |
| INDUSTRIAL | 1012. | 562. | 270. | 482. | 645. | 1856. | 1919. | 859. |
| COMMERCIAL | 18. | 18. | 15. | 10. | 116. | 769. | 586. | 155. |
| DISTILLATE OIL (1000 BBL) | | | | | | | | |
| ELECTRIC UTILITIES | 21. | 4. | 4. | 3. | 7. | 109. | 244. | 237. |
| INDUSTRIAL | 362. | 203. | 588. | 457. | 733. | 1237. | 1690. | 2485. |
| COMMERCIAL-RESIDENTIAL | 1121. | 1577. | 2354. | 3784. | 5111. | 3455. | 5362. | 5854. |
| NATURAL GAS (10E6 CU. FT.) | | | | | | | | |
| ELECTRIC UTILITIES | 3257. | 6043. | 2288. | 394. | 8533. | 272. | 1208. | 1902. |
| INDUSTRIAL | 21124. | 53588. | 53316. | 50195. | 72524. | 64856. | 56378. | 64872. |
| PIPELINES | 6571. | 10631. | 18932. | 27632. | 38057. | 24758. | 24244. | 21916. |
| COMMERCIAL-RESIDENTIAL | 33628. | 53277. | 81273. | 85437. | 128934. | 117653. | 131083. | 113594. |
| WOOD (1000 TONS) | | | | | | | | |
| ELECTRIC UTILITIES | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| INDUSTRIAL | 330. | 392. | 422. | 595. | 781. | 1150. | 1158. | 1207. |
| COMMERCIAL | 26. | 20. | 16. | 12. | 11. | 12. | 19. | 26. |
| RESIDENTIAL | 1388. | 1070. | 865. | 653. | 587. | 630. | 1006. | 1368. |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE (1000 GAL.) | 544938. | 729753. | 875907. | 1111163. | NA | NA | NA | NA |
| DIESEL (1000 GAL.) | 10542. | 12852. | 8820. | 17934. | 80934. | 146244. | 216636. | 247380. |
| RURAL VMT (10E6 MILES) | NA | NA | NA | NA | 13567. | 15634. | 16465. | 15301. |
| URBAN VMT (10E6 MILES) | NA | NA | NA | NA | 6393. | 9054. | 11638. | 9932. |
| OTHER | | | | | | | | |
| RAILROADS-COAL(1000 TONS) | 1336. | 415. | 85. | 0. | 0. | 0. | 0. | 0. |
| -OIL(1000 BBL) | 518. | 1037. | 1792. | 1743. | 1351. | 1864. | 2882. | 3691. |
| COKE PLANTS (1000 TONS COAL) | 1762. | 1902. | 1586. | 1850. | 1591. | 1241. | 866. | 746. |
| VESSELS-DISTILLATE(1000 BBL) | 22. | 99. | 132. | 148. | 230. | 199. | 395. | 778. |
| -RESIDUAL(1000 BBL) | 12. | 75. | 6. | 7. | 0. | 1. | 0. | 0. |
| OFF HIGHWAY DIESEL (1000 BBL) | 410. | 413. | 580. | 811. | 639. | 1196. | 2553. | 3320. |
| CEMENT PLANT (1000 TONS) | 350. | 457. | 513. | 530. | 166. | 164. | 902. | 793. |

TABLE 1. FUEL CONSUMPTION 1900-1945 FOR THE STATE OF LOUISIANA

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL(1000 TONS) | | | | | | | | | | |
| ELECTRIC UTILITIES | 45. | 74. | 101. | 135. | 181. | 253. | 238. | 140. | 171. | 176. |
| INDUSTRIAL BOILERS | 491. | 681. | 855. | 1031. | 840. | 451. | 211. | 140. | 120. | 96. |
| COMMERCIAL-RESIDENTIAL | 192. | 278. | 369. | 492. | 519. | 592. | 578. | 384. | 312. | 310. |
| ANTHRACITE COAL (1000 TONS) | | | | | | | | | | |
| ALL USES | 10. | 13. | 14. | 15. | 15. | 11. | NA | NA | NA | NA |
| RESIDUAL OIL (1000 BBL) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | 443. | 352. | 311. | 140. | 249. |
| INDUSTRIAL | NA | NA | NA | NA | NA | 1419. | 1357. | 1343. | 828. | 1137. |
| COMMERCIAL | NA | NA | NA | NA | NA | 261. | 443. | 711. | 1213. | 5452. |
| DISTILLATE OIL (1000 BBL) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | 38. | 31. | 27. | 108. | 77. |
| INDUSTRIAL | NA | NA | NA | NA | NA | 97. | 93. | 92. | 79. | 308. |
| COMMERCIAL -RESIDENTIAL | NA | NA | NA | NA | NA | 153. | 260. | 417. | 655. | 2516. |
| NATURAL GAS (10E6 CU. FT.) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | 3406. | 7121. | 18577. | 17947. | 26246. | 42516. |
| INDUSTRIAL | NA | NA | NA | 21704. | 41372. | 142781. | 156965. | 92354. | 142397. | 302555. |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | NA | 3836. | 4847. | 5219. | 8574. | 8833. | 16466. | 23333. |
| WOOD (1000 TONS) | | | | | | | | | | |
| ALL USES | 3693. | 3509. | 3361. | 3213. | 3065. | 2918. | 2770. | 2659. | 2585. | 2401. |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE(1000 GAL) | NA | NA | NA | NA | NA | 109686. | 173312. | 175612. | 249757. | 264426. |
| DIESEL (1000 GAL.) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL(1000 TONS) | 852. | 1229. | 1531. | 1699. | 1839. | 1480. | 1232. | 934. | 979. | 1334. |
| RAILROADS-OIL(1000 BBL) | NA | NA | NA | NA | NA | 5004. | 4705. | 3856. | 3289. | 3962. |
| COKE PL (1000 TONS COAL) | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| VES FUEL OIL (1000 BBL) | NA | NA | NA | NA | NA | 5336. | 6335. | 5019. | 4766. | 2970. |
| CEMENT PL (1000 TONS) | 0. | 0. | 0. | 0. | 0. | 0. | NA | NA | NA | NA |

TABLE 2. FUEL CONSUMPTION 1950-1980 FOR THE STATE OF LOUISIANA

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL(1000 TONS) | | | | | | | | |
| ELECTRIC UTILITIES | 0. | 0. | 0. | 0. | 0. | 0. | 32. | 2823. |
| INDUSTRIAL BOILERS | 0. | 92. | 55. | 53. | 0. | 0. | 166. | 108. |
| COMMERCIAL-RESIDENTIAL | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 4. |
| ANTHRACITE COAL (1000 TONS) | | | | | | | | |
| ALL USES | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| RESIDUAL OIL (1000 BBL) | | | | | | | | |
| ELECTRIC UTILITIES | 98. | 32. | 49. | 22. | 428. | 5035. | 21926. | 5139. |
| INDUSTRIAL | 1048. | 1066. | 605. | 399. | 1065. | 5128. | 10101. | 12109. |
| COMMERCIAL | 768. | 232. | 33. | 4. | 1012. | 2572. | 3179. | 16584. |
| DISTILLATE OIL (1000 BBL) | | | | | | | | |
| ELECTRIC UTILITIES | 135. | 63. | 51. | 47. | 55. | 1248. | 2973. | 2116. |
| INDUSTRIAL | 521. | 851. | 2058. | 2444. | 1731. | 4033. | 5728. | 5487. |
| COMMERCIAL-RESIDENTIAL | 1728. | 2995. | 1636. | 910. | 3317. | 4601. | 4809. | 1033. |
| NATURAL GAS (10E6 CU. FT.) | | | | | | | | |
| ELECTRIC UTILITIES | 60845. | 70813. | 119818. | 186455. | 330648. | 356130. | 369183. | 424991. |
| INDUSTRIAL | 431288. | 701440. | 677545. | 768784. | 995158. | 922673. | 969932. | 985611. |
| PIPELINES | 8947. | 19358. | 151995. | 259670. | 358565. | 362902. | 639620. | 270316. |
| COMMERCIAL-RESIDENTIAL | 35265. | 53522. | 79282. | 83615. | 156469. | 166883. | 147278. | 113089. |
| WOOD (1000 TONS) | | | | | | | | |
| ELECTRIC UTILITIES | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| INDUSTRIAL | 1354. | 1606. | 1730. | 1867. | 2160. | 2158. | 2431. | 2232. |
| COMMERCIAL | 16. | 12. | 10. | 7. | 5. | 6. | 7. | 7. |
| RESIDENTIAL | 846. | 652. | 527. | 353. | 255. | 299. | 343. | 375. |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE (1000 GAL.) | 499815. | 720562. | 909350. | 1176023. | NA | NA | NA | NA |
| DIESEL (1000 GAL.) | 15456. | 20664. | 50316. | 32172. | 93240. | 158508. | 250194. | 283752. |
| RURAL VMT (10E6 MILES) | NA | NA | NA | NA | 10284. | 11966. | 13838. | 14485. |
| URBAN VMT (10E6 MILES) | NA | NA | NA | NA | 6554. | 8360. | 8919. | 9932. |
| OTHER | | | | | | | | |
| RAILROADS-COAL(1000 TONS) | 727. | 236. | 50. | 24. | 11. | 0. | 0. | 0. |
| -OIL(1000 BBL) | 1823. | 1280. | 1006. | 1093. | 948. | 2451. | 2551. | 2139. |
| COKE PLANTS (1000 TONS COAL) | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| VESSELS-DISTILLATE(1000 BBL) | 440. | 522. | 856. | 625. | 822. | 1361. | 1362. | 856. |
| -RESIDUAL(1000 BBL) | 1879. | 2148. | 1918. | 1639. | 2170. | 3689. | 4681. | 7033. |
| OFF HIGHWAY DIESEL (1000 BBL) | 665. | 1365. | 1646. | 1068. | 2935. | 2471. | 5698. | 1168. |
| CEMENT PLANT (1000 TONS) | 327. | 637. | 937. | 1163. | 1018. | 1050. | 1252. | 1308. |

TABLE 1. FUEL CONSUMPTION 1900-1945 FOR THE STATE OF MAINE

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL(1000 TONS) | | | | | | | | | | |
| ELECTRIC UTILITIES | 84. | 139. | 189. | 253. | 286. | 294. | 250. | 157. | 214. | 258. |
| INDUSTRIAL BOILERS | 400. | 599. | 810. | 1047. | 1068. | 1010. | 790. | 606. | 641. | 689. |
| COMMERCIAL-RESIDENTIAL | 71. | 111. | 157. | 223. | 241. | 275. | 303. | 252. | 271. | 389. |
| ANTHRACITE COAL (1000 TONS) | | | | | | | | | | |
| ALL USES | 1284. | 1740. | 1876. | 1967. | 1984. | 1482. | 516. | 390. | 648. | 695. |
| RESIDUAL OIL (1000 BBL) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | 228. | 181. | 160. | 302. | 276. |
| INDUSTRIAL | NA | NA | NA | NA | NA | 1222. | 1168. | 1156. | 1039. | 939. |
| COMMERCIAL | NA | NA | NA | NA | NA | 12. | 21. | 33. | 56. | 18. |
| DISTILLATE OIL (1000 BBL) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | 23. | 18. | 16. | 30. | 25. |
| INDUSTRIAL | NA | NA | NA | NA | NA | 37. | 35. | 35. | 24. | 37. |
| COMMERCIAL -RESIDENTIAL | NA | NA | NA | NA | NA | 375. | 637. | 1022. | 1605. | 1437. |
| NATURAL GAS (10E6 CU. FT.) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | 0. | 0. | 0. | 0. | 0. | 0. |
| INDUSTRIAL | NA | NA | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| WOOD (1000 TONS) | | | | | | | | | | |
| ALL USES | 2902. | 2757. | 2641. | 2524. | 2408. | 2292. | 2176. | 2089. | 2031. | 1886. |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE(1000 GAL) | NA | NA | NA | NA | NA | 56621. | 103004. | 115471. | 150002. | 125621. |
| DIESEL (1000 GAL.) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL(1000 TONS) | 460. | 718. | 961. | 1145. | 1296. | 1074. | 924. | 723. | 809. | 1204. |
| RAILROADS-OIL(1000 BBL) | NA | NA | NA | NA | NA | 8. | 7. | 6. | 9. | 43. |
| COKE PL (1000 TONS COAL) | 27. | 37. | 52. | 57. | 82. | 94. | 111. | 90. | 163. | 211. |
| VES FUEL OIL (1000 BBL) | NA | NA | NA | NA | NA | 23. | 28. | 22. | 29. | 356. |
| CEMENT PL (1000 TONS) | 0. | 0. | 0. | 0. | 0. | 0. | NA | NA | NA | NA |

TABLE 2. FUEL CONSUMPTION 1950-1980 FOR THE STATE OF MAINE

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL(1000 TONS) | | | | | | | | |
| ELECTRIC UTILITIES | 5. | 0. | 17. | 0. | 0. | 0. | 0. | 0. |
| INDUSTRIAL BOILERS | 0. | 12. | 18. | 127. | 25. | 25. | 15. | 105. |
| COMMERCIAL-RESIDENTIAL | 4. | 3. | 3. | 42. | 6. | 4. | 0. | 25. |
| ANTHRACITE COAL (1000 TONS) | | | | | | | | |
| ALL USES | 239. | 150. | 221. | 93. | 13. | 3. | 4. | 15. |
| RESIDUAL OIL (1000 BBL) | | | | | | | | |
| ELECTRIC UTILITIES | 1221. | 1702. | 2256. | 4547. | 4872. | 2745. | 1772. | 3469. |
| INDUSTRIAL | 1869. | 1723. | 1467. | 967. | 2511. | 4076. | 6315. | 4050. |
| COMMERCIAL | 28. | 115. | 1179. | 322. | 2925. | 2120. | 2984. | 647. |
| DISTILLATE OIL (1000 BBL) | | | | | | | | |
| ELECTRIC UTILITIES | 104. | 141. | 110. | 147. | 118. | 146. | 65. | 64. |
| INDUSTRIAL | 95. | 106. | 169. | 290. | 377. | 322. | 511. | 396. |
| COMMERCIAL-RESIDENTIAL | 3009. | 3349. | 8040. | 9532. | 11676. | 10398. | 11740. | 8672. |
| NATURAL GAS (10E6 CU. FT.) | | | | | | | | |
| ELECTRIC UTILITIES | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| INDUSTRIAL | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 747. |
| PIPELINES | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 102. |
| COMMERCIAL-RESIDENTIAL | 0. | 0. | 0. | 0. | 2218. | 2452. | 2660. | 1419. |
| WOOD (1000 TONS) | | | | | | | | |
| ELECTRIC UTILITIES | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| INDUSTRIAL | 933. | 1107. | 1192. | 1366. | 1451. | 1556. | 2013. | 1998. |
| COMMERCIAL | 14. | 11. | 9. | 7. | 5. | 6. | 12. | 16. |
| RESIDENTIAL | 794. | 612. | 495. | 374. | 258. | 339. | 626. | 844. |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE (1000 GAL.) | 215441. | 280749. | 335221. | 387982. | NA | NA | NA | NA |
| DIESEL (1000 GAL.) | 2856. | 3444. | 3738. | 12726. | 27846. | 38136. | 55230. | 56658. |
| RURAL VMT (10E6 MILES) | NA | NA | NA | NA | 4521. | 5037. | 5643. | 5255. |
| URBAN VMT (10E6 MILES) | NA | NA | NA | NA | 1587. | 1879. | 2329. | 2210. |
| OTHER | | | | | | | | |
| RAILROADS-COAL(1000 TONS) | 519. | 105. | 13. | 0. | 0. | 0. | 0. | 0. |
| -OIL(1000 BBL) | 317. | 561. | 383. | 285. | 392. | 305. | 248. | 189. |
| COKE PLANTS (1000 TONS COAL) | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| VESSELS-DISTILLATE(1000 BBL) | 15. | 8. | 24. | 14. | 15. | 20. | 20. | 8. |
| -RESIDUAL(1000 BBL) | 32. | 100. | 120. | 107. | 339. | 221. | 84. | 50. |
| OFF HIGHWAY DIESEL (1000 BBL) | 80. | 91. | 117. | 105. | 203. | 189. | 97. | 183. |
| CEMENT PLANT (1000 TONS) | 147. | 208. | 209. | 307. | 431. | 304. | 340. | 304. |

TABLE 1. FUEL CONSUMPTION 1900-1945 FOR THE STATE OF MARYLAND

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL(1000 TONS) | | | | | | | | | | |
| ELECTRIC UTILITIES | 101. | 167. | 228. | 304. | 383. | 485. | 527. | 425. | 748. | 1196. |
| INDUSTRIAL BOILERS | 1360. | 1776. | 2091. | 2350. | 2164. | 1850. | 1510. | 1344. | 1633. | 2013. |
| COMMERCIAL-RESIDENTIAL | 228. | 311. | 385. | 481. | 493. | 563. | 692. | 677. | 829. | 1334. |
| ANTHRACITE COAL (1000 TONS) | | | | | | | | | | |
| ALL USES | 829. | 1123. | 1211. | 1270. | 1281. | 957. | 454. | 343. | 571. | 785. |
| RESIDUAL OIL (1000 BBL) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | 598. | 475. | 420. | 590. | 765. |
| INDUSTRIAL | NA | NA | NA | NA | NA | 4196. | 4010. | 3970. | 4249. | 5374. |
| COMMERCIAL | NA | NA | NA | NA | NA | 80. | 136. | 218. | 516. | 715. |
| DISTILLATE OIL (1000 BBL) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | 20. | 16. | 14. | 28. | 36. |
| INDUSTRIAL | NA | NA | NA | NA | NA | 119. | 114. | 113. | 149. | 289. |
| COMMERCIAL -RESIDENTIAL | NA | NA | NA | NA | NA | 175. | 297. | 476. | 634. | 1471. |
| NATURAL GAS (10E6 CU. FT.) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | 0. | 0. | 0. | NA | NA | NA |
| INDUSTRIAL | NA | NA | 0. | 0. | 83. | 0. | NA | 3326. | 5128. | 1349. |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | 0. | 0. | 486. | NA | NA | 3420. | 6376. | 9909. |
| WOOD (1000 TONS) | | | | | | | | | | |
| ALL USES | 2465. | 2342. | 2243. | 2145. | 2046. | 1947. | 1849. | 1775. | 1726. | 1602. |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE(1000 GAL) | NA | NA | NA | NA | NA | 102590. | 176564. | 207692. | 294208. | 266407. |
| DIESEL (1000 GAL.) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL(1000 TONS) | 981. | 1332. | 1553. | 1604. | 1776. | 1559. | 1414. | 1165. | 1344. | 2032. |
| RAILROADS-OIL(1000 BBL) | NA | NA | NA | NA | NA | 73. | 68. | 56. | 102. | 246. |
| COKE PL (1000 TONS COAL) | 445. | 516. | 635. | 584. | 932. | 1268. | 1591. | 1344. | 2476. | 3264. |
| VES FUEL OIL (1000 BBL) | NA | NA | NA | NA | NA | 3023. | 3590. | 2844. | 3534. | 5807. |
| CEMENT PL (1000 TONS) | 0. | 0. | NA | NA | NA | NA | NA | NA | NA | NA |

TABLE 2. FUEL CONSUMPTION 1950-1980 FOR THE STATE OF MARYLAND

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL(1000 TONS) | | | | | | | | |
| ELECTRIC UTILITIES | 1687. | 1971. | 3088. | 6018. | 6229. | 3979. | 4580. | 6626. |
| INDUSTRIAL BOILERS | 769. | 719. | 870. | 1200. | 877. | 294. | 616. | 711. |
| COMMERCIAL-RESIDENTIAL | 318. | 200. | 181. | 165. | 59. | 14. | 6. | 37. |
| ANTHRACITE COAL (1000 TONS) | | | | | | | | |
| ALL USES | 542. | 367. | 271. | 247. | 97. | 12. | 9. | 10. |
| RESIDUAL OIL (1000 BBL) | | | | | | | | |
| ELECTRIC UTILITIES | 881. | 109. | 170. | 459. | 10371. | 16323. | 18795. | 7722. |
| INDUSTRIAL | 6583. | 7622. | 7992. | 5197. | 2602. | 2849. | 2709. | 2574. |
| COMMERCIAL | 373. | 145. | 4486. | 4345. | 5691. | 3909. | 3540. | 1284. |
| DISTILLATE OIL (1000 BBL) | | | | | | | | |
| ELECTRIC UTILITIES | 64. | 179. | 301. | 148. | 1001. | 1788. | 1336. | 1671. |
| INDUSTRIAL | 261. | 672. | 344. | 786. | 1191. | 1520. | 2333. | 1895. |
| COMMERCIAL-RESIDENTIAL | 1713. | 2202. | 12053. | 13854. | 15245. | 13633. | 12636. | 12939. |
| NATURAL GAS (10E6 CU. FT.) | | | | | | | | |
| ELECTRIC UTILITIES | 4. | 42. | 78. | 46. | 11436. | 451. | 544. | 5230. |
| INDUSTRIAL | 2584. | 9310. | 18113. | 31022. | 39607. | 38848. | 31670. | 54414. |
| PIPELINES | 37. | 886. | 859. | 1216. | 2032. | 2193. | 1861. | 3944. |
| COMMERCIAL-RESIDENTIAL | 11192. | 32416. | 48172. | 65128. | 91379. | 88012. | 90418. | 96656. |
| WOOD (1000 TONS) | | | | | | | | |
| ELECTRIC UTILITIES | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| INDUSTRIAL | 708. | 840. | 905. | 1187. | 1401. | 1313. | 1621. | 1656. |
| COMMERCIAL | 14. | 11. | 9. | 7. | 8. | 10. | 15. | 19. |
| RESIDENTIAL | 757. | 584. | 472. | 381. | 438. | 525. | 764. | 1001. |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE (1000 GAL.) | 494777. | 716507. | 911502. | 1187527. | NA | NA | NA | NA |
| DIESEL (1000 GAL.) | 8148. | 11298. | 25662. | 70980. | 75390. | 102690. | 129108. | 163422. |
| RURAL VMT (10E6 MILES) | NA | NA | NA | NA | 10016. | 12018. | 11004. | 11215. |
| URBAN VMT (10E6 MILES) | NA | NA | NA | NA | 10476. | 13168. | 17055. | 17370. |
| OTHER | | | | | | | | |
| RAILROADS-COAL(1000 TONS) | 1117. | 347. | 71. | 0. | 0. | 0. | 0. | 0. |
| -OIL(1000 BBL) | 642. | 1158. | 1130. | 1706. | 1657. | 1269. | 996. | 833. |
| COKE PLANTS (1000 TONS COAL) | 3301. | 4479. | 3195. | 4939. | 5037. | 3574. | 2599. | 2608. |
| VESSELS-DISTILLATE(1000 BBL) | 119. | 181. | 101. | 26. | 96. | 102. | 140. | 154. |
| -RESIDUAL(1000 BBL) | 1240. | 1200. | 893. | 768. | 879. | 563. | 791. | 1100. |
| OFF HIGHWAY DIESEL (1000 BBL) | 148. | 201. | 220. | 516. | 659. | 736. | 698. | 658. |
| CEMENT PLANT (1000 TONS) | 606. | 700. | 1112. | 1274. | 1438. | 1228. | 1515. | 1427. |

TABLE 1. FUEL CONSUMPTION 1900-1945 FOR THE STATE OF MASSACHUSETTS

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL(1000 TONS) | | | | | | | | | | |
| ELECTRIC UTILITIES | 419. | 693. | 948. | 1265. | 1455. | 1559. | 1378. | 902. | 1287. | 1663. |
| INDUSTRIAL BOILERS | 3642. | 4610. | 5238. | 5641. | 5455. | 5365. | 4140. | 2999. | 2951. | 2915. |
| COMMERCIAL-RESIDENTIAL | 632. | 835. | 1000. | 1198. | 1207. | 1376. | 1538. | 1315. | 1449. | 2132. |
| ANTHRACITE COAL (1000 TONS) | | | | | | | | | | |
| ALL USES | 1284. | 1740. | 1876. | 1967. | 1984. | 1482. | 516. | 390. | 648. | 695. |
| RESIDUAL OIL (1000 BBL) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | 1409. | 1120. | 990. | 1521. | 1650. |
| INDUSTRIAL | NA | NA | NA | NA | NA | 6899. | 6594. | 6528. | 6320. | 4697. |
| COMMERCIAL | NA | NA | NA | NA | NA | 109. | 184. | 296. | 532. | 947. |
| DISTILLATE OIL (1000 BBL) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | 353. | 281. | 248. | 249. | 367. |
| INDUSTRIAL | NA | NA | NA | NA | NA | 525. | 502. | 497. | 294. | 476. |
| COMMERCIAL -RESIDENTIAL | NA | NA | NA | NA | NA | 3457. | 5872. | 9424. | 13132. | 11290. |
| NATURAL GAS (10E6 CU. FT.) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | 0. | 0. | 0. | 0. | 0. | 0. |
| INDUSTRIAL | NA | NA | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| WOOD (1000 TONS) | | | | | | | | | | |
| ALL USES | 3938. | 3741. | 3584. | 3426. | 3269. | 3111. | 2954. | 2836. | 2757. | 2560. |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE(1000 GAL) | NA | NA | NA | NA | NA | 376867. | 529427. | 585035. | 716216. | 533480. |
| DIESEL (1000 GAL.) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL(1000 TONS) | 1642. | 2163. | 2432. | 2404. | 2519. | 2088. | 1795. | 1405. | 1572. | 2338. |
| RAILROADS-OIL(1000 BBL) | NA | NA | NA | NA | NA | 34. | 32. | 26. | 54. | 294. |
| COKE PL (1000 TONS COAL) | 268. | 303. | 359. | 314. | 424. | 505. | 544. | 385. | 606. | 694. |
| VES FUEL OIL (1000 BBL) | NA | NA | NA | NA | NA | 1967. | 2335. | 1850. | 1628. | 3778. |
| CEMENT PL (1000 TONS) | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |

TABLE 2. FUEL CONSUMPTION 1950-1980 FOR THE STATE OF MASSACHUSETTS

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL(1000 TONS) | | | | | | | | |
| ELECTRIC UTILITIES | 1018. | 1895. | 2446. | 4066. | 444. | 288. | 0. | 313. |
| INDUSTRIAL BOILERS | 0. | 690. | 1047. | 575. | 135. | 91. | 62. | 96. |
| COMMERCIAL-RESIDENTIAL | 289. | 182. | 404. | 105. | 29. | 11. | 0. | 101. |
| ANTHRACITE COAL (1000 TONS) | | | | | | | | |
| ALL USES | 1917. | 933. | 235. | 99. | 46. | 14. | 14. | 63. |
| RESIDUAL OIL (1000 BBL) | | | | | | | | |
| ELECTRIC UTILITIES | 11333. | 8434. | 10433. | 12788. | 42327. | 40141. | 48473. | 44519. |
| INDUSTRIAL | 10111. | 11783. | 11100. | 8910. | 9787. | 5438. | 5422. | 2415. |
| COMMERCIAL | 378. | 614. | 16183. | 29143. | 32131. | 20650. | 17505. | 4875. |
| DISTILLATE OIL (1000 BBL) | | | | | | | | |
| ELECTRIC UTILITIES | 1108. | 197. | 273. | 318. | 1187. | 380. | 435. | 412. |
| INDUSTRIAL | 641. | 863. | 800. | 1054. | 899. | 900. | 1256. | 1402. |
| COMMERCIAL-RESIDENTIAL | 13536. | 11563. | 52850. | 55633. | 55117. | 52008. | 51750. | 30534. |
| NATURAL GAS (10E6 CU. FT.) | | | | | | | | |
| ELECTRIC UTILITIES | 0. | 8532. | 10785. | 10154. | 5711. | 1437. | 1557. | 5083. |
| INDUSTRIAL | 0. | 13299. | 13714. | 23721. | 22513. | 23986. | 26030. | 28943. |
| PIPELINES | 0. | 1202. | 274. | 233. | 1081. | 506. | 503. | 675. |
| COMMERCIAL-RESIDENTIAL | 0. | 29431. | 55253. | 81153. | 88025. | 128038. | 132413. | 147886. |
| WOOD (1000 TONS) | | | | | | | | |
| ELECTRIC UTILITIES | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| INDUSTRIAL | 1551. | 1839. | 1981. | 2384. | 2778. | 2266. | 2951. | 3062. |
| COMMERCIAL | 14. | 11. | 9. | 8. | 10. | 11. | 16. | 21. |
| RESIDENTIAL | 798. | 615. | 497. | 439. | 534. | 571. | 839. | 1109. |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE (1000 GAL.) | 938785. | 1181250. | 1438336. | 1723648. | NA | NA | NA | NA |
| DIESEL (1000 GAL.) | 12600. | 16716. | 22974. | 48930. | 105672. | 115878. | 154056. | 182532. |
| RURAL VMT (10E6 MILES) | NA | NA | NA | NA | 7167. | 5597. | 6658. | 6623. |
| URBAN VMT (10E6 MILES) | NA | NA | NA | NA | 18905. | 23503. | 28395. | 28767. |
| OTHER | | | | | | | | |
| RAILROADS-COAL(1000 TONS) | 1008. | 205. | 25. | 0. | 0. | 0. | 0. | 0. |
| -OIL(1000 BBL) | 1004. | 1388. | 730. | 736. | 406. | 511. | 108. | 280. |
| COKE PLANTS (1000 TONS COAL) | 1194. | 779. | 89. | 0. | 0. | 0. | 0. | 0. |
| VESSELS-DISTILLATE(1000 BBL) | 128. | 50. | 141. | 125. | 85. | 104. | 140. | 39. |
| -RESIDUAL(1000 BBL) | 266. | 217. | 124. | 103. | 433. | 155. | 194. | 222. |
| OFF HIGHWAY DIESEL (1000 BBL) | 230. | 224. | 152. | 289. | 390. | 220. | 143. | 250. |
| CEMENT PLANT (1000 TONS) | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |

TABLE 1. FUEL CONSUMPTION 1900-1945 FOR THE STATE OF MICHIGAN

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL(1000 TONS) | | | | | | | | | | |
| ELECTRIC UTILITIES | 413. | 683. | 934. | 1247. | 1595. | 2084. | 2175. | 1631. | 2688. | 4063. |
| INDUSTRIAL BOILERS | 2481. | 3858. | 5377. | 7120. | 8469. | 10085. | 9171. | 7787. | 9083. | 10797. |
| COMMERCIAL-RESIDENTIAL | 1107. | 1797. | 2625. | 3828. | 4169. | 4756. | 5506. | 4970. | 5734. | 8784. |
| ANTHRACITE COAL (1000 TONS) | | | | | | | | | | |
| ALL USES | 548. | 742. | 800. | 839. | 846. | 632. | 162. | 122. | 203. | 239. |
| RESIDUAL OIL (1000 BBL) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | 275. | 218. | 193. | 149. | 149. |
| INDUSTRIAL | NA | NA | NA | NA | NA | 5297. | 5062. | 5012. | 4354. | 4226. |
| COMMERCIAL | NA | NA | NA | NA | NA | 20. | 34. | 54. | 101. | 207. |
| DISTILLATE OIL (1000 BBL) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | 43. | 34. | 30. | 192. | 193. |
| INDUSTRIAL | NA | NA | NA | NA | NA | 443. | 423. | 419. | 797. | 1442. |
| COMMERCIAL -RESIDENTIAL | NA | NA | NA | NA | NA | 81. | 138. | 221. | 603. | 820. |
| NATURAL GAS (10E6 CU. FT.) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | NA | NA | 12. | 18. | 14. |
| INDUSTRIAL | NA | NA | 1. | 1100. | NA | NA | 1720. | 6188. | 9541. | 21990. |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | 0. | 1. | 0. | 0. | 355. | 12461. | 23231. | 37604. |
| WOOD (1000 TONS) | | | | | | | | | | |
| ALL USES | 4617. | 4386. | 4201. | 4017. | 3832. | 3647. | 3463. | 3324. | 3232. | 3001. |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE(1000 GAL) | NA | NA | NA | NA | NA | 443900. | 735123. | 784716. | 1101900. | 914911. |
| DIESEL (1000 GAL.) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL(1000 TONS) | 1159. | 1875. | 2591. | 3167. | 3619. | 3002. | 2581. | 2020. | 2259. | 3362. |
| RAILROADS-OIL(1000 BBL) | NA | NA | NA | NA | NA | 91. | 85. | 70. | 79. | 297. |
| COKE PL (1000 TONS COAL) | 386. | 532. | 788. | 890. | 1626. | 2294. | 2661. | 1987. | 3300. | 3983. |
| VES FUEL OIL (1000 BBL) | NA | NA | NA | NA | NA | 50. | 59. | 47. | 129. | 87. |
| CEMENT PL (1000 TONS) | 125. | 521. | 693. | 896. | 920. | 2056. | 2164. | 861. | 1617. | 1098. |

TABLE 2. FUEL CONSUMPTION 1950-1980 FOR THE STATE OF MICHIGAN

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL(1000 TONS) | | | | | | | | |
| ELECTRIC UTILITIES | 6465. | 8998. | 10300. | 16123. | 23244. | 21802. | 21192. | 23004. |
| INDUSTRIAL BOILERS | 5115. | 4781. | 8777. | 11330. | 7439. | 3882. | 3415. | 4555. |
| COMMERCIAL-RESIDENTIAL | 6776. | 4262. | 2383. | 1758. | 1008. | 262. | 73. | 308. |
| ANTHRACITE COAL (1000 TONS) | | | | | | | | |
| ALL USES | 383. | 142. | 66. | 109. | 87. | 63. | 54. | 31. |
| RESIDUAL OIL (1000 BBL) | | | | | | | | |
| ELECTRIC UTILITIES | 36. | 11. | 5. | 37. | 4528. | 14465. | 18043. | 8335. |
| INDUSTRIAL | 9467. | 10842. | 7691. | 5770. | 4008. | 2103. | 2884. | 3182. |
| COMMERCIAL | 104. | 499. | 2772. | 1322. | 1006. | 2172. | 3627. | 249. |
| DISTILLATE OIL (1000 BBL) | | | | | | | | |
| ELECTRIC UTILITIES | 1389. | 541. | 433. | 376. | 957. | 2057. | 2511. | 1049. |
| INDUSTRIAL | 2926. | 3078. | 1096. | 1522. | 2097. | 2126. | 2884. | 1526. |
| COMMERCIAL-RESIDENTIAL | 4398. | 5483. | 28199. | 28788. | 28919. | 28386. | 28229. | 12792. |
| NATURAL GAS (10E6 CU. FT.) | | | | | | | | |
| ELECTRIC UTILITIES | 73. | 332. | 5209. | 2736. | 32163. | 47151. | 36334. | 26368. |
| INDUSTRIAL | 39812. | 60506. | 127673. | 207574. | 290413. | 301573. | 267414. | 242363. |
| PIPELINES | 911. | 1808. | 2601. | 4559. | 13807. | 18645. | 14651. | 18859. |
| COMMERCIAL-RESIDENTIAL | 86457. | 144691. | 244978. | 355830. | 472741. | 516815. | 471195. | 577547. |
| WOOD (1000 TONS) | | | | | | | | |
| ELECTRIC UTILITIES | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| INDUSTRIAL | 672. | 797. | 859. | 1091. | 1136. | 1145. | 1632. | 1554. |
| COMMERCIAL | 39. | 30. | 24. | 20. | 18. | 18. | 29. | 42. |
| RESIDENTIAL | 2059. | 1587. | 1283. | 1035. | 964. | 925. | 1538. | 2224. |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE (1000 GAL.) | 1671700.. | 2237095. | 2563798. | 3240913. | NA | NA | NA | NA |
| DIESEL (1000 GAL.) | 18270. | 22554. | 29064. | 70434. | 179004. | 248010. | 366156. | 299880. |
| RURAL VMT (10E6 MILES) | NA | NA | NA | NA | 23188. | 22902. | 23198. | 23672. |
| URBAN VMT (10E6 MILES) | NA | NA | NA | NA | 29923. | 35271. | 44178. | 38387. |
| OTHER | | | | | | | | |
| RAILROADS-COAL(1000 TONS) | 1450. | 294. | 35. | 0. | 0. | 0. | 0. | 0. |
| -OIL(1000 BBL) | 1006. | 1622. | 1827. | 1558. | 1625. | 2428. | 1992. | 2094. |
| COKE PLANTS (1000 TONS COAL) | 3722. | 4580. | 4439. | 5404. | 4942. | 5343. | 2928. | 3339. |
| VESSELS-DISTILLATE(1000 BBL) | 7. | 10. | 9. | 20. | 20. | 39. | 12. | 16. |
| -RESIDUAL(1000 BBL) | 57. | 245. | 110. | 112. | 88. | 77. | 57. | 44. |
| OFF HIGHWAY DIESEL (1000 BBL) | 180. | 362. | 728. | 1870. | 1949. | 1627. | 1684. | 652. |
| CEMENT PLANT (1000 TONS) | 2438. | 3423. | 3943. | 5079. | 5575. | 4634. | 5926. | 4767. |

TABLE 1. FUEL CONSUMPTION 1900-1945 FOR THE STATE OF MINNESOTA

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL(1000 TONS) | | | | | | | | | | |
| ELECTRIC UTILITIES | 206. | 341. | 466. | 622. | 652. | 553. | 449. | 329. | 530. | 784. |
| INDUSTRIAL BOILERS | 911. | 1277. | 1622. | 1978. | 2350. | 2909. | 2590. | 2083. | 2307. | 2609. |
| COMMERCIAL-RESIDENTIAL | 1323. | 1939. | 2591. | 3493. | 3696. | 4216. | 4257. | 3046. | 2756. | 3247. |
| ANTHRACITE COAL (1000 TONS) | | | | | | | | | | |
| ALL USES | 1090. | 1477. | 1593. | 1670. | 1685. | 1258. | 49. | 37. | 61. | 108. |
| RESIDUAL OIL (1000 BBL) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | 94. | 75. | 66. | 69. | 153. |
| INDUSTRIAL | NA | NA | NA | NA | NA | 319. | 305. | 302. | 283. | 361. |
| COMMERCIAL | NA | NA | NA | NA | NA | 34. | 57. | 92. | 47. | 38. |
| DISTILLATE OIL (1000 BBL) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | 47. | 37. | 33. | 105. | 136. |
| INDUSTRIAL | NA | NA | NA | NA | NA | 170. | 163. | 161. | 76. | 203. |
| COMMERCIAL -RESIDENTIAL | NA | NA | NA | NA | NA | 67. | 115. | 184. | 647. | 758. |
| NATURAL GAS (10E6 CU. FT.) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | NA | NA | 1569. | 2294. | 6681. |
| INDUSTRIAL | NA | NA | 0. | 0. | 0. | 0. | 0. | 6332. | 9763. | 24278. |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | 0. | 0. | 0. | 0. | 0. | 4209. | 7847. | 11652. |
| WOOD (1000 TONS) | | | | | | | | | | |
| ALL USES | 3608. | 3428. | 3284. | 3139. | 2995. | 2851. | 2706. | 2598. | 2526. | 2345. |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE(1000 GAL) | NA | NA | NA | NA | NA | 230891. | 345964. | 376090. | 498617. | 408125. |
| DIESEL (1000 GAL.) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL(1000 TONS) | 2067. | 3013. | 3794. | 4254. | 4626. | 3721. | 3100. | 2348. | 2464. | 3358. |
| RAILROADS-OIL(1000 BBL) | NA | NA | NA | NA | NA | 103. | 96. | 79. | 227. | 423. |
| COKE PL (1000 TONS COAL) | 307. | 380. | 507. | 515. | 720. | 826. | 880. | 622. | 978. | 1119. |
| VES FUEL OIL (1000 BBL) | NA | NA | NA | NA | NA | 1. | 1. | 1. | 2. | 2. |
| CEMENT PL (1000 TONS) | 0. | 0. | 0. | 0. | NA | NA | NA | NA | NA | NA |

TABLE 2. FUEL CONSUMPTION 1950-1980 FOR THE STATE OF MINNESOTA

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL(1000 TONS) | | | | | | | | |
| ELECTRIC UTILITIES | 1472. | 1818. | 2433. | 3857. | 6181. | 878 | 11198. | 12097. |
| INDUSTRIAL BOILERS | 750. | 701. | 2100. | 1538. | 1309. | 1140. | 1443. | 1026. |
| COMMERCIAL-RESIDENTIAL | 446. | 281. | 944. | 617. | 675. | 154. | 53. | 143. |
| ANTHRACITE COAL (1000 TONS) | | | | | | | | |
| ALL USES | 46. | 129. | 13. | 39. | 29. | 11. | 5. | 0. |
| RESIDUAL OIL (1000 BBL) | | | | | | | | |
| ELECTRIC UTILITIES | 165. | 105. | 78. | 298. | 843. | 748. | 1171. | 268. |
| INDUSTRIAL | 1184. | 960. | 4869. | 3205. | 3236. | 2834. | 1436. | 1795. |
| COMMERCIAL | 12. | 30. | 1311. | 1242. | 1003. | 717. | 1453. | 79. |
| DISTILLATE OIL (1000 BBL) | | | | | | | | |
| ELECTRIC UTILITIES | 526. | 388. | 314. | 149. | 600. | 864. | 707. | 608. |
| INDUSTRIAL | 356. | 1374. | 900. | 969. | 846. | 805. | 1020. | 1337. |
| COMMERCIAL-RESIDENTIAL | 1781. | 2685. | 13112. | 15114. | 16358. | 15477. | 17694. | 7512. |
| NATURAL GAS (10E6 CU. FT.) | | | | | | | | |
| ELECTRIC UTILITIES | 17764. | 31232. | 48521. | 44673. | 58617. | 62412. | 1536. | 8077. |
| INDUSTRIAL | 36159. | 66256. | 49049. | 88619. | 97906. | 100539. | 120086. | 101473. |
| PIPELINES | 322. | 128. | 304. | 1180. | 7450. | 3871. | 3659. | 9129. |
| COMMERCIAL-RESIDENTIAL | 31380. | 57350. | 81751. | 113363. | 178349. | 204067. | 187948. | 167167. |
| WOOD (1000 TONS) | | | | | | | | |
| ELECTRIC UTILITIES | 161. | 77. | 22. | 21. | 29. | 0. | 0. | 0. |
| INDUSTRIAL | 335. | 397. | 428. | 542. | 688. | 924. | 1219. | 1216. |
| COMMERCIAL | 31. | 24. | 19. | 15. | 12. | 12. | 20. | 27. |
| RESIDENTIAL | 1638. | 1263. | 1021. | 793. | 651. | 655. | 1029. | 1421. |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE (1000 GAL.) | 725126. | 947813. | 1189877. | 1378785. | NA | NA | NA | NA |
| DIESEL (1000 GAL.) | 13398. | 19278. | 24444. | 50988. | 130158. | 176862. | 251454. | 249312. |
| RURAL VMT (10E6 MILES) | NA | NA | NA | NA | 12670. | 11475. | 15520. | 14710. |
| URBAN VMT (10E6 MILES) | NA | NA | NA | NA | 9710. | 14149. | 13297. | 13805. |
| OTHER | | | | | | | | |
| RAILROADS-COAL(1000 TONS) | 1829. | 594. | 125. | 61. | 28. | 0. | 0. | 0. |
| -OIL(1000 BBL) | 1194. | 1393. | 2543. | 2008. | 2047. | 2115. | 1475. | 1845. |
| COKE PLANTS (1000 TONS COAL) | 1146. | 1426. | 784. | 984. | 604. | 957. | 508. | 9. |
| VESSELS-DISTILLATE(1000 BBL) | 0. | 4. | 9. | 16. | 21. | 32. | 43. | 64. |
| -RESIDUAL(1000 BBL) | 26. | 6. | 9. | 1. | 0. | 148. | 122. | 232. |
| OFF HIGHWAY DIESEL (1000 BBL) | 190. | 425. | 977. | 1363. | 1054. | 1070. | 1063. | 727. |
| CEMENT PLANT (1000 TONS) | 169. | 214. | 242. | 266. | 0. | 0. | 0. | 0. |

TABLE 1. FUEL CONSUMPTION 1900-1945 FOR THE STATE OF MISSISSIPPI

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL(1000 TONS) | | | | | | | | | | |
| ELECTRIC UTILITIES | 79. | 131. | 179. | 239. | 231. | 144. | 151. | 188. | 425. | 803. |
| INDUSTRIAL BOILERS | 255. | 369. | 484. | 608. | 581. | 486. | 400. | 363. | 450. | 564. |
| COMMERCIAL-RESIDENTIAL | 136. | 206. | 284. | 394. | 421. | 480. | 515. | 413. | 428. | 592. |
| ANTHRACITE COAL (1000 TONS) | | | | | | | | | | |
| ALL USES | 1. | 2. | 2. | 2. | 2. | 2. | NA | NA | NA | NA |
| RESIDUAL OIL (1000 BBL) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | 46. | 36. | 32. | 2. | 26. |
| INDUSTRIAL | NA | NA | NA | NA | NA | 115. | 110. | 109. | 32. | 98. |
| COMMERCIAL | NA | NA | NA | NA | NA | 125. | 212. | 340. | 57. | 220. |
| DISTILLATE OIL (1000 BBL) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | 34. | 27. | 24. | 28. | 38. |
| INDUSTRIAL | NA | NA | NA | NA | NA | 33. | 31. | 31. | 33. | 53. |
| COMMERCIAL -RESIDENTIAL | NA | NA | NA | NA | NA | 73. | 125. | 200. | 282. | 495. |
| NATURAL GAS (10E6 CU. FT.) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | 44. | 92. | 239. | 661. | 967. | 3211. |
| INDUSTRIAL | NA | NA | 0. | 0. | 0. | 0. | 812. | 6580. | 10146. | 28685. |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | 0. | 0. | 0. | 0. | 684. | 3510. | 6544. | 9612. |
| WOOD (1000 TONS) | | | | | | | | | | |
| ALL USES | 5763. | 5475. | 5245. | 5014. | 4784. | 4553. | 4323. | 4150. | 4034. | 3746. |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE(1000 GAL) | NA | NA | NA | NA | NA | 77040. | 125968. | 125267. | 200565. | 214585. |
| DIESEL (1000 GAL.) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL(1000 TONS) | 1119. | 1686. | 2190. | 2533. | 2940. | 2580. | 2341. | 1928. | 2223. | 3363. |
| RAILROADS-OIL(1000 BBL) | NA | NA | NA | NA | NA | 86. | 81. | 66. | 154. | 180. |
| COKE PL (1000 TONS COAL) | 0. | 0. | 0. | 0. | 0. | 0. | 216. | 417. | 1091. | 1770. |
| VES FUEL OIL (1000 BBL) | NA | NA | NA | NA | NA | 4. | 5. | 4. | 12. | 55. |
| CEMENT PL (1000 TONS) | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |

TABLE 2. FUEL CONSUMPTION 1950-1980 FOR THE STATE OF MISSISSIPPI

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL(1000 TONS) | | | | | | | | |
| ELECTRIC UTILITIES | 0. | 2. | 8. | 9. | 489. | 1573. | 1732. | 3568. |
| INDUSTRIAL BOILERS | 0. | 0. | 1. | 0. | 2. | 20. | 70. | 54. |
| COMMERCIAL-RESIDENTIAL | 0. | 0. | 0. | 0. | 0. | 0. | 1. | 2. |
| ANTHRACITE COAL (1000 TONS) | | | | | | | | |
| ALL USES | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| RESIDUAL OIL (1000 BBL) | | | | | | | | |
| ELECTRIC UTILITIES | 2. | 58. | 97. | 17. | 609. | 6810. | 18234. | 4124. |
| INDUSTRIAL | 106. | 64. | 223. | 143. | 217. | 1803. | 2396. | 2160. |
| COMMERCIAL | 2. | 40. | 4. | 0. | 49. | 347. | 470. | 3412. |
| DISTILLATE OIL (1000 BBL) | | | | | | | | |
| ELECTRIC UTILITIES | 142. | 6. | 0. | 0. | 5. | 2836. | 1516. | 299. |
| INDUSTRIAL | 79. | 131. | 385. | 302. | 755. | 776. | 1703. | 876. |
| COMMERCIAL-RESIDENTIAL | 1027. | 1283. | 117. | 350. | 1118. | 3294. | 5106. | 109. |
| NATURAL GAS (10E6 CU. FT.) | | | | | | | | |
| ELECTRIC UTILITIES | 15378. | 33298. | 34358. | 54409. | 97287. | 31507. | 43246. | 95073. |
| INDUSTRIAL | 51467. | 93973. | 87298. | 121699. | 135379. | 98848. | 71699. | 74384. |
| PIPELINES | 9415. | 16950. | 31385. | 45265. | 67228. | 46246. | 37075. | 43702. |
| COMMERCIAL-RESIDENTIAL | 16036. | 27263. | 39200. | 36519. | 60488. | 53452. | 51699. | 50371. |
| WOOD (1000 TONS) | | | | | | | | |
| ELECTRIC UTILITIES | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| INDUSTRIAL | 844. | 1001. | 1078. | 1102. | 1339. | 1210. | 1562. | 1487. |
| COMMERCIAL | 48. | 37. | 30. | 20. | 11. | 11. | 12. | 12. |
| RESIDENTIAL | 2566. | 1978. | 1599. | 1073. | 599. | 590. | 611. | 620. |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE (1000 GAL.) | 405952. | 537274. | 646348. | 801818. | NA | NA | NA | NA |
| DIESEL (1000 GAL.) | 12222. | 13062. | 12600. | 21546. | 104286. | 124068. | 173292. | 202608. |
| RURAL VMT (10E6 MILES) | NA | NA | NA | NA | 8135. | 9709. | 11457. | 11276. |
| URBAN VMT (10E6 MILES) | NA | NA | NA | NA | 3492. | 4649. | 5352. | 5238. |
| OTHER | | | | | | | | |
| RAILROADS-COAL(1000 TONS) | 1847. | 574. | 117. | 0. | 0. | 0. | 0. | 0. |
| -OIL(1000 BBL) | 316. | 490. | 532. | 260. | 451. | 243. | 376. | 917. |
| COKE PLANTS (1000 TONS COAL) | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| VESSELS-DISTILLATE(1000 BBL) | 22. | 22. | 5. | 86. | 95. | 311. | 459. | 53. |
| -RESIDUAL(1000 BBL) | 31. | 4. | 0. | 67. | 1. | 295. | 550. | 1342. |
| OFF HIGHWAY DIESEL (1000 BBL) | 373. | 437. | 1046. | 1046. | 1749. | 1234. | 2471. | 789. |
| CEMENT PLANT (1000 TONS) | NA | 292. | 429. | 533. | 271. | 280. | 334. | 349. |

TABLE 1. FUEL CONSUMPTION 1900-1945 FOR THE STATE OF MISSOURI

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL(1000 TONS) | | | | | | | | | | |
| ELECTRIC UTILITIES | 284. | 471. | 644. | 859. | 1014. | 1145. | 1056. | 714. | 1058. | 1432. |
| INDUSTRIAL BOILERS | 3444. | 4557. | 5452. | 6239. | 5891. | 5235. | 4032. | 3180. | 3450. | 3821. |
| COMMERCIAL-RESIDENTIAL | 1839. | 2544. | 3205. | 4072. | 4206. | 4797. | 5065. | 3948. | 3962. | 5306. |
| ANTHRACITE COAL (1000 TONS) | | | | | | | | | | |
| ALL USES | 242. | 328. | 354. | 371. | 375. | 280. | NA | NA | NA | NA |
| RESIDUAL OIL (1000 BBL) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | 228. | 181. | 160. | 78. | 214. |
| INDUSTRIAL | NA | NA | NA | NA | NA | 1069. | 1022. | 1012. | 938. | 1772. |
| COMMERCIAL | NA | NA | NA | NA | NA | 141. | 240. | 385. | 194. | 341. |
| DISTILLATE OIL (1000 BBL) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | 67. | 53. | 47. | 201. | 385. |
| INDUSTRIAL | NA | NA | NA | NA | NA | 142. | 135. | 134. | 117. | 256. |
| COMMERCIAL -RESIDENTIAL | NA | NA | NA | NA | NA | 142. | 241. | 386. | 632. | 853. |
| NATURAL GAS (10E6 CU. FT.) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | 177. | 370. | 966. | 7357. | 10759. | 14714. |
| INDUSTRIAL | NA | NA | 24. | 4667. | 679. | 526. | 15998. | 16014. | 24692. | 47215. |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | 23. | 0. | 4750. | 4846. | 9158. | 9489. | 17690. | 24844. |
| WOOD (1000 TONS) | | | | | | | | | | |
| ALL USES | 4652. | 4419. | 4233. | 4047. | 3861. | 3675. | 3489. | 3349. | 3256. | 3024. |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE(1000 GAL) | NA | NA | NA | NA | NA | 208555. | 433117. | 501408. | 664044. | 554209. |
| DIESEL (1000 GAL.) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL(1000 TONS) | 807. | 1111. | 1316. | 1385. | 1465. | 1179. | 981. | 744. | 780. | 1064. |
| RAILROADS-OIL(1000 BBL) | NA | NA | NA | NA | NA | 2174. | 2044. | 1675. | 1825. | 2206. |
| COKE PL (1000 TONS COAL) | 201. | 236. | 295. | 278. | 223. | 59. | 20. | 38. | 101. | 164. |
| VES FUEL OIL (1000 BBL) | NA | NA | NA | NA | NA | 1. | 1. | 1. | 125. | 55. |
| CEMENT PL (1000 TONS) | 0. | 729. | 838. | 870. | 1131. | 1566. | 1468. | 638. | 934. | 599. |

TABLE 2. FUEL CONSUMPTION 1950-1980 FOR THE STATE OF MISSOURI

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL(1000 TONS) | | | | | | | | |
| ELECTRIC UTILITIES | 1090. | 2304. | 3674. | 5690. | 11497. | 17858. | 20522. | 22236. |
| INDUSTRIAL BOILERS | 1835. | 1715. | 2214. | 1942. | 1498. | 1502. | 1549. | 1413. |
| COMMERCIAL-RESIDENTIAL | 2413. | 1518. | 1185. | 301. | 109. | 103. | 63. | 82. |
| ANTHRACITE COAL (1000 TONS) | | | | | | | | |
| ALL USES | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| RESIDUAL OIL (1000 BBL) | | | | | | | | |
| ELECTRIC UTILITIES | 251. | 184. | 60. | 4. | 185. | 784. | 816. | 25. |
| INDUSTRIAL | 2054. | 2771. | 1254. | 1230. | 1454. | 984. | 1059. | 704. |
| COMMERCIAL | 64. | 89. | 1577. | 1806. | 1912. | 1178. | 1678. | 697. |
| DISTILLATE OIL (1000 BBL) | | | | | | | | |
| ELECTRIC UTILITIES | 485. | 392. | 245. | 146. | 152. | 421. | 1901. | 471. |
| INDUSTRIAL | 780. | 621. | 607. | 571. | 743. | 1083. | 1283. | 677. |
| COMMERCIAL-RESIDENTIAL | 2145. | 2624. | 8073. | 6066. | 6623. | 6610. | 7477. | 2489. |
| NATURAL GAS (10E6 CU. FT.) | | | | | | | | |
| ELECTRIC UTILITIES | 21206. | 22679. | 302510. | 40569. | 63104. | 26320. | 27269. | 15329. |
| INDUSTRIAL | 73735. | 95374. | 83652. | 119318. | 109464. | 89913. | 69030. | 78064. |
| PIPELINES | 4987. | 7261. | 7964. | 8925. | 2663. | 7490. | 4419. | 5578. |
| COMMERCIAL-RESIDENTIAL | 61662. | 96637. | 143794. | 170530. | 244215. | 245897. | 257693. | 219479. |
| WOOD (1000 TONS) | | | | | | | | |
| ELECTRIC UTILITIES | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| INDUSTRIAL | 331. | 393. | 423. | 507. | 574. | 741. | 953. | 946. |
| COMMERCIAL | 47. | 36. | 29. | 20. | 15. | 16. | 25. | 32. |
| RESIDENTIAL | 2413. | 1860. | 1504. | 1044. | 784. | 819. | 1297. | 1705. |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE (1000 GAL.) | 1073220. | 1367508. | 1591098. | 1858445. | NA | NA | NA | NA |
| DIESEL (1000 GAL.) | 18102. | 22302. | 45864. | 90048. | 206892. | 243096. | 342300. | 354060. |
| RURAL VMT (10E6 MILES) | NA | NA | NA | NA | 13074. | 14898. | 17203. | 17045. |
| URBAN VMT (10E6 MILES) | NA | NA | NA | NA | 12711. | 15777. | 17457. | 17016. |
| OTHER | | | | | | | | |
| RAILROADS-COAL(1000 TONS) | 579. | 188. | 40. | 19. | 9. | 0. | 0. | 0. |
| -OIL(1000 BBL) | 2174. | 3805. | 3174. | 3434. | 2608. | 2117. | 2538. | 1737. |
| COKE PLANTS (1000 TONS COAL) | 249. | 269. | 224. | 213. | 293. | 278. | 182. | 201. |
| VESSELS-DISTILLATE(1000 BBL) | 8. | 53. | 46. | 170. | 248. | 103. | 49. | 146. |
| -RESIDUAL(1000 BBL) | 48. | 37. | 1. | 0. | 0. | 1. | 1. | 0. |
| OFF HIGHWAY DIESEL (1000 BBL) | 94. | 284. | 1037. | 1231. | 756. | 724. | 1236. | 923. |
| CEMENT PLANT (1000 TONS) | 1404. | 1775. | 2015. | 2627. | 3899. | 3919. | 4620. | 3606. |

TABLE 1. FUEL CONSUMPTION 1900-1945 FOR THE STATE OF MONTANA

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL(1000 TONS) | | | | | | | | | | |
| ELECTRIC UTILITIES | 30. | 49. | 67. | 89. | 87. | 56. | 31. | 18. | 23. | 24. |
| INDUSTRIAL BOILERS | 403. | 562. | 708. | 859. | 871. | 853. | 652. | 464. | 448. | 431. |
| COMMERCIAL-RESIDENTIAL | 454. | 660. | 877. | 1175. | 1241. | 1415. | 1458. | 1084. | 1031. | 1290. |
| ANTHRACITE COAL (1000 TONS) | | | | | | | | | | |
| ALL USES | 3. | 4. | 5. | 5. | 5. | 4. | NA | NA | NA | NA |
| RESIDUAL OIL (1000 BBL) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDUSTRIAL | NA | NA | NA | NA | NA | 226. | 216. | 214. | 245. | 245. |
| COMMERCIAL | NA | NA | NA | NA | NA | 24. | 41. | 66. | 12. | 687. |
| DISTILLATE OIL (1000 BBL) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | 6. | 5. | 4. | 4. | 13. |
| INDUSTRIAL | NA | NA | NA | NA | NA | NA | NA | NA | 18. | 66. |
| COMMERCIAL -RESIDENTIAL | NA | NA | NA | NA | NA | 30. | 52. | 83. | 166. | 725. |
| NATURAL GAS (10E6 CU. FT.) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | 109. | 227. | 592. | 619. | 905. | 1191. |
| INDUSTRIAL | NA | NA | 0. | 0. | 665. | 1305. | 4430. | 7455. | 11495. | 15927. |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | 0. | 9. | 153. | 1303. | 3636. | 5325. | 9928. | 13648. |
| WOOD (1000 TONS) | | | | | | | | | | |
| ALL USES | 955. | 907. | 869. | 831. | 793. | 754. | 716. | 688. | 669. | 621. |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE(1000 GAL) | NA | NA | NA | NA | NA | 27909. | 60620. | 80959. | 109723. | 88298. |
| DIESEL (1000 GAL.) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL(1000 TONS) | 1044. | 1511. | 1889. | 2105. | 2283. | 1836. | 1529. | 1159. | 1216. | 1657. |
| RAILROADS-OIL(1000 BBL) | NA | NA | NA | NA | NA | 1729. | 1625. | 1332. | 1500. | 5739. |
| COKE PL (1000 TONS COAL) | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| VES FUEL OIL (1000 BBL) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CEMENT PL (1000 TONS) | 0. | 0. | NA | NA | NA | NA | NA | NA | NA | NA |

TABLE 2. FUEL CONSUMPTION 1950-1980 FOR THE STATE OF MONTANA

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL(1000 TONS) | | | | | | | | |
| ELECTRIC UTILITIES | 0. | 0. | 187. | 296. | 652. | 1203. | 3334. | 3462. |
| INDUSTRIAL BOILERS | 9. | 9. | 8. | 84. | 18. | 42. | 183. | 182. |
| COMMERCIAL-RESIDENTIAL | 459. | 289. | 224. | 166. | 12. | 7. | 4. | 14. |
| ANTHRACITE COAL (1000 TONS) | | | | | | | | |
| ALL USES | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| RESIDUAL OIL (1000 BBL) | | | | | | | | |
| ELECTRIC UTILITIES | 10. | 2. | 2. | 0. | 9. | 0. | 0. | 0. |
| INDUSTRIAL | 466. | 617. | 1256. | 322. | 901. | 1565. | 1635. | 3900. |
| COMMERCIAL | 44. | 12. | 354. | 504. | 228. | 556. | 950. | 7. |
| DISTILLATE OIL (1000 BBL) | | | | | | | | |
| ELECTRIC UTILITIES | 5. | 1. | 0. | 0. | 0. | 59. | 87. | 94. |
| INDUSTRIAL | 12. | 66. | 160. | 225. | 158. | 1274. | 1636. | 448. |
| COMMERCIAL-RESIDENTIAL | 759. | 901. | 1531. | 1335. | 1131. | 1516. | 2152. | 790. |
| NATURAL GAS (10E6 CU. FT.) | | | | | | | | |
| ELECTRIC UTILITIES | 897. | 633. | 341. | 1785. | 2529. | 1059. | 909. | 4182. |
| INDUSTRIAL | 17670. | 22096. | 24186. | 33304. | 36105. | 31631. | 26686. | 16717. |
| PIPELINES | 632. | 497. | 485. | 426. | 5799. | 4079. | 4344. | 6264. |
| COMMERCIAL-RESIDENTIAL | 20242. | 24898. | 28803. | 34018. | 43358. | 42751. | 40710. | 33561. |
| WOOD (1000 TONS) | | | | | | | | |
| ELECTRIC UTILITIES | 0. | 0. | 0. | 30. | 59. | 11. | 43. | 14. |
| INDUSTRIAL | 122. | 145. | 156. | 216. | 176. | 172. | 315. | 291. |
| COMMERCIAL | 8. | 6. | 5. | 4. | 3. | 3. | 5. | 7. |
| RESIDENTIAL | 443. | 341. | 276. | 212. | 162. | 178. | 281. | 378. |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE (1000 GAL.) | 176755. | 229296. | 269646. | 319584. | NA | NA | NA | NA |
| DIESEL (1000 GAL.) | 11508. | 14448. | 22218. | 44772. | 59514. | 71694. | 99960. | 97230. |
| RURAL VMT (10E6 MILES) | NA | NA | NA | NA | 3865. | 4337. | 5575. | 4541. |
| URBAN VMT (10E6 MILES) | NA | NA | NA | NA | 1002. | 1386. | 1446. | 2082. |
| OTHER | | | | | | | | |
| RAILROADS-COAL(1000 TONS) | 903. | 293. | 62. | 30. | 14. | 0. | 0. | 0. |
| -OIL(1000 BBL) | 4594. | 2929. | 2540. | 1945. | 1697. | 2037. | 1954. | 2395. |
| COKE PLANTS (1000 TONS COAL) | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| VESSELS-DISTILLATE(1000 BBL) | 0. | 0. | 0. | 1. | 0. | 0. | 0. | 0. |
| -RESIDUAL(1000 BBL) | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| OFF HIGHWAY DIESEL (1000 BBL) | 368. | 356. | 783. | 960. | 609. | 598. | 417. | 441. |
| CEMENT PLANT (1000 TONS) | 221. | 302. | 284. | 393. | 523. | 622. | 655. | 618. |

TABLE 1. FUEL CONSUMPTION 1900-1945 FOR THE STATE OF NEBRASKA

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL(1000 TONS) | | | | | | | | | | |
| ELECTRIC UTILITIES | 142. | 236. | 322. | 430. | 487. | 504. | 422. | 257. | 333. | 377. |
| INDUSTRIAL BOILERS | 845. | 1065. | 1203. | 1285. | 1112. | 864. | 589. | 425. | 416. | 409. |
| COMMERCIAL-RESIDENTIAL | 1069. | 1405. | 1673. | 1990. | 1997. | 2278. | 2250. | 1536. | 1302. | 1390. |
| ANTHRACITE COAL (1000 TONS) | | | | | | | | | | |
| ALL USES | 344. | 466. | 503. | 527. | 532. | 397. | NA | NA | NA | NA |
| RESIDUAL OIL (1000 BBL) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | 122. | 97. | 86. | 101. | 162. |
| INDUSTRIAL | NA | NA | NA | NA | NA | 49. | 46. | 46. | 38. | 78. |
| COMMERCIAL | NA | NA | NA | NA | NA | 46. | 78. | 125. | 87. | 13. |
| DISTILLATE OIL (1000 BBL) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | 186. | 148. | 131. | 180. | 82. |
| INDUSTRIAL | NA | NA | NA | NA | NA | 12. | 11. | 11. | 15. | 43. |
| COMMERCIAL -RESIDENTIAL | NA | NA | NA | NA | NA | 50. | 85. | 136. | 370. | 630. |
| NATURAL GAS (10E6 CU. FT.) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | 48. | 101. | 263. | 3990. | 5835. | 2815. |
| INDUSTRIAL | NA | NA | 0. | NA | 0. | 0. | 918. | 4622. | 7127. | 17273. |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | 0. | 0. | 0. | 0. | 180. | 3822. | 7125. | 10962. |
| WOOD (1000 TONS) | | | | | | | | | | |
| ALL USES | 370. | 352. | 337. | 322. | 307. | 292. | 278. | 266. | 259. | 241. |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE(1000 GAL) | NA | NA | NA | NA | NA | 124285. | 204218. | 197521. | 211823. | 191380. |
| DIESEL (1000 GAL.) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL(1000 TONS) | 1508. | 1976. | 2209. | 2165. | 2220. | 1785. | 1488. | 1127. | 1182. | 1610. |
| RAILROADS-OIL(1000 BBL) | NA | NA | NA | NA | NA | 231. | 217. | 178. | 234. | 630. |
| COKE PL (1000 TONS COAL) | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| VES FUEL OIL (1000 BBL) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CEMENT PL (1000 TONS) | 0. | 0. | 0. | NA | NA | NA | NA | NA | NA | NA |

TABLE 2. FUEL CONSUMPTION 1950-1980 FOR THE STATE OF NEBRASKA

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL(1000 TONS) | | | | | | | | |
| ELECTRIC UTILITIES | 127. | 125. | 256. | 486. | 501. | 1468. | 2901. | 4719. |
| INDUSTRIAL BOILERS | 187. | 175. | 210. | 364. | 222. | 259. | 555. | 291. |
| COMMERCIAL-RESIDENTIAL | 240. | 151. | 104. | 43. | 55. | 6. | 6. | 19. |
| ANTHRACITE COAL (1000 TONS) | | | | | | | | |
| ALL USES | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| RESIDUAL OIL (1000 BBL) | | | | | | | | |
| ELECTRIC UTILITIES | 107. | 35. | 65. | 93. | 194. | 631. | 1037. | 26. |
| INDUSTRIAL | 100. | 84. | 6. | 53. | 211. | 104. | 101. | 29. |
| COMMERCIAL | 3. | 2. | 53. | 58. | 132. | 239. | 256. | 23. |
| DISTILLATE OIL (1000 BBL) | | | | | | | | |
| ELECTRIC UTILITIES | 266. | 131. | 113. | 113. | 141. | 348. | 137. | 189. |
| INDUSTRIAL | 126. | 176. | 36. | 110. | 483. | 330. | 509. | 153. |
| COMMERCIAL-RESIDENTIAL | 892. | 1408. | 2355. | 2100. | 2775. | 2684. | 3612. | 591. |
| NATURAL GAS (10E6 CU. FT.) | | | | | | | | |
| ELECTRIC UTILITIES | 12105. | 21046. | 30973. | 32571. | 47593. | 37659. | 12837. | 11850. |
| INDUSTRIAL | 29706. | 51312. | 39415. | 52816. | 54838. | 72792. | 51176. | 48162. |
| PIPELINES | 3813. | 4222. | 6294. | 8659. | 14785. | 11463. | 10109. | 10796. |
| COMMERCIAL-RESIDENTIAL | 28223. | 46643. | 61434. | 73137. | 105119. | 96920. | 88929. | 92271. |
| WOOD (1000 TONS) | | | | | | | | |
| ELECTRIC UTILITIES | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| INDUSTRIAL | 18. | 21. | 23. | 29. | 30. | 90. | 137. | 133. |
| COMMERCIAL | 3. | 2. | 2. | 2. | 1. | 1. | 2. | 2. |
| RESIDENTIAL | 201. | 155. | 125. | 80. | 60. | 70. | 82. | 90. |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE (1000 GAL.) | 391385. | 494909. | 550504. | 626782. | NA | NA | NA | NA |
| DIESEL (1000 GAL.) | 8526. | 15330. | 11928. | 24402. | 70182. | 107058. | 133896. | 143892. |
| RURAL VMT (10E6 MILES) | NA | NA | NA | NA | 6461. | 6528. | 7602. | 7335. |
| URBAN VMT (10E6 MILES) | NA | NA | NA | NA | 3139. | 4683. | 4884. | 3920. |
| OTHER | | | | | | | | |
| RAILROADS-COAL(1000 TONS) | 878. | 285. | 60. | 29. | 13. | 0. | 0. | 0. |
| -OIL(1000 BBL) | 796. | 1257. | 1362. | 778. | 2342. | 2043. | 3717. | 1629. |
| COKE PLANTS (1000 TONS COAL) | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| VESSELS-DISTILLATE(1000 BBL) | 0. | 0. | 0. | 1. | 6. | 0. | 2. | 3. |
| -RESIDUAL(1000 BBL) | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| OFF HIGHWAY DIESEL (1000 BBL) | 187. | 274. | 661. | 604. | 1033. | 832. | 1095. | 272. |
| CEMENT PLANT (1000 TONS) | 418. | 528. | 599. | 657. | 846. | 914. | 755. | 584. |

TABLE 1. FUEL CONSUMPTION 1900-1945 FOR THE STATE OF NEVADA

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL(1000 TONS) | | | | | | | | | | |
| ELECTRIC UTILITIES | 1. | 1. | 1. | 2. | 1. | 0. | 0. | 0. | 0. | 1. |
| INDUSTRIAL BOILERS | 68. | 107. | 150. | 200. | 235. | 272. | 216. | 147. | 133. | 115. |
| COMMERCIAL-RESIDENTIAL | 36. | 59. | 88. | 128. | 140. | 160. | 157. | 106. | 88. | 91. |
| ANTHRACITE COAL (1000 TONS) | | | | | | | | | | |
| ALL USES | 0. | 0. | 0. | 0. | 0. | 0. | NA | NA | NA | NA |
| RESIDUAL OIL (1000 BBL) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | 20. | 16. | 14. | 37. | 24. |
| INDUSTRIAL | NA | NA | NA | NA | NA | 76. | 73. | 72. | 50. | 350. |
| COMMERCIAL | NA | NA | NA | NA | NA | 7. | 12. | 20. | 11. | 27. |
| DISTILLATE OIL (1000 BBL) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | 6. | 5. | 4. | 4. | 9. |
| INDUSTRIAL | NA | NA | NA | NA | NA | 24. | 23. | 23. | 43. | 41. |
| COMMERCIAL -RESIDENTIAL | NA | NA | NA | NA | NA | 26. | 45. | 72. | 69. | 133. |
| NATURAL GAS (10E6 CU. FT.) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | 0. | 0. | 0. | 0. | 0. | 0. |
| INDUSTRIAL | NA | NA | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| WOOD (1000 TONS) | | | | | | | | | | |
| ALL USES | 148. | 141. | 135. | 129. | 123. | 117. | 111. | 107. | 104. | 96. |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE(1000 GAL) | NA | NA | NA | NA | NA | 8929. | 17030. | 25072. | 38694. | 36354. |
| DIESEL (1000 GAL.) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL(1000 TONS) | 252. | 412. | 573. | 705. | 794. | 638. | 532. | 403. | 423. | 576. |
| RAILROADS-OIL(1000 BBL) | NA | NA | NA | NA | NA | 4503. | 4234. | 3470. | 2929. | 6170. |
| COKE PL (1000 TONS COAL) | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| VES FUEL OIL (1000 BBL) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CEMENT PL (1000 TONS) | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |

TABLE 2. FUEL CONSUMPTION 1950-1980 FOR THE STATE OF NEVADA

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL(1000 TONS) | | | | | | | | |
| ELECTRIC UTILITIES | 0. | 0. | 0. | 180. | 555. | 4444. | 3762. | 4496. |
| INDUSTRIAL BOILERS | 54. | 51. | 45. | 70. | 24. | 63. | 81. | 138. |
| COMMERCIAL-RESIDENTIAL | 19. | 12. | 9. | 25. | 74. | 5. | 1. | 4. |
| ANTHRACITE COAL (1000 TONS) | | | | | | | | |
| ALL USES | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 2. |
| RESIDUAL OIL (1000 BBL) | | | | | | | | |
| ELECTRIC UTILITIES | 0. | 0. | 2. | 0. | 81. | 1371. | 2693. | 2494. |
| INDUSTRIAL | 184. | 79. | 11. | 18. | 17. | 16. | 6. | 1. |
| COMMERCIAL | 42. | 8. | 158. | 56. | 41. | 63. | 42. | 7. |
| DISTILLATE OIL (1000 BBL) | | | | | | | | |
| ELECTRIC UTILITIES | 18. | 2. | 36. | 10. | 13. | 89. | 13. | 83. |
| INDUSTRIAL | 68. | 127. | 165. | 255. | 226. | 342. | 534. | 296. |
| COMMERCIAL-RESIDENTIAL | 214. | 248. | 514. | 648. | 802. | 569. | 706. | 547. |
| NATURAL GAS (10E6 CU. FT.) | | | | | | | | |
| ELECTRIC UTILITIES | 0. | 2838. | 6339. | 13562. | 25336. | 25152. | 21749. | 27541. |
| INDUSTRIAL | 0. | 12076. | 3442. | 7896. | 10327. | 10043. | 11039. | 7354. |
| PIPELINES | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 170. |
| COMMERCIAL-RESIDENTIAL | 0. | 1014. | 2804. | 6531. | 16895. | 26056. | 120647. | 23389. |
| WOOD (1000 TONS) | | | | | | | | |
| ELECTRIC UTILITIES | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| INDUSTRIAL | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| COMMERCIAL | 2. | 1. | 1. | 1. | 1. | 1. | 2. | 2. |
| RESIDENTIAL | 87. | 67. | 54. | 50. | 60. | 71. | 98. | 126. |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE (1000 GAL.) | 72861. | 124313. | 159783. | 250077. | NA | NA | NA | NA |
| DIESEL (1000 GAL.) | 7896. | 4956. | 11844. | 15372. | 35742. | 45024. | 63000. | 76896. |
| RURAL VMT (10E6 MILES) | NA | NA | NA | NA | 1983. | 2447. | 3059. | 3288. |
| URBAN VMT (10E6 MILES) | NA | NA | NA | NA | 1477. | 1992. | 2691. | 2819. |
| OTHER | | | | | | | | |
| RAILROADS-COAL(1000 TONS) | 314. | 102. | 21. | 11. | 5. | 0. | 0. | 0. |
| -OIL(1000 BBL) | 3546. | 1979. | 1192. | 1204. | 698. | 253. | 612. | 898. |
| COKE PLANTS (1000 TONS COAL) | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| VESSELS-DISTILLATE(1000 BBL) | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| -RESIDUAL(1000 BBL) | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| OFF HIGHWAY DIESEL (1000 BBL) | 137. | 103. | 205. | 282. | 288. | 193. | 392. | 194. |
| CEMENT PLANT (1000 TONS) | 0. | 0. | 0. | 0. | 330. | 383. | 449. | 457. |

TABLE 1. FUEL CONSUMPTION 1900-1945 FOR THE STATE OF NEW HAMPSHIRE

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL(1000 TONS) | | | | | | | | | | |
| ELECTRIC UTILITIES | 48. | 80. | 109. | 146. | 166. | 174. | 149. | 94. | 129. | 158. |
| INDUSTRIAL BOILERS | 342. | 455. | 548. | 631. | 620. | 594. | 471. | 367. | 392. | 428. |
| COMMERCIAL-RESIDENTIAL | 60. | 83. | 105. | 134. | 139. | 159. | 176. | 150. | 164. | 240. |
| ANTHRACITE COAL (1000 TONS) | | | | | | | | | | |
| ALL USES | 1284. | 1740. | 1876. | 1967. | 1984. | 1482. | 516. | 390. | 648. | 695. |
| RESIDUAL OIL (1000 BBL) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | 198. | 157. | 139. | 275. | 87. |
| INDUSTRIAL | NA | NA | NA | NA | NA | 234. | 223. | 221. | 312. | 219. |
| COMMERCIAL | NA | NA | NA | NA | NA | NA | NA | NA | 1. | 1. |
| DISTILLATE OIL (1000 BBL) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | 80. | 63. | 56. | 85. | 72. |
| INDUSTRIAL | NA | NA | NA | NA | NA | 53. | 51. | 50. | 51. | 23. |
| COMMERCIAL -RESIDENTIAL | NA | NA | NA | NA | NA | 262. | 445. | 714. | 915. | 858. |
| NATURAL GAS (10E6 CU. FT.) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | 0. | 0. | 0. | 0. | 0. | 0. |
| INDUSTRIAL | NA | NA | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| WOOD (1000 TONS) | | | | | | | | | | |
| ALL USES | 1125. | 1069. | 1024. | 979. | 934. | 889. | 844. | 810. | 788. | 731. |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE(1000 GAL) | NA | NA | NA | NA | NA | 35380. | 62671. | 72653. | 91413. | 69069. |
| DIESEL (1000 GAL.) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL(1000 TONS) | 371. | 514. | 612. | 649. | 701. | 582. | 499. | 391. | 438. | 652. |
| RAILROADS-OIL(1000 BBL) | NA | NA | NA | NA | NA | 1. | 1. | 1. | 1. | 5. |
| COKE PL (1000 TONS COAL) | 25. | 29. | 37. | 35. | 48. | 55. | 66. | 56. | 102. | 133. |
| VES FUEL OIL (1000 BBL) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CEMENT PL (1000 TONS) | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |

TABLE 2. FUEL CONSUMPTION 1950-1980 FOR THE STATE OF NEW HAMPSHIRE

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL(1000 TONS) | | | | | | | | |
| ELECTRIC UTILITIES | 30. | 22. | 94. | 358. | 1013. | 1054. | 790. | 1134. |
| INDUSTRIAL BOILERS | 0. | 68. | 101. | 113. | 223. | 4. | 1. | 11. |
| COMMERCIAL-RESIDENTIAL | 23. | 15. | 16. | 19. | 3. | 0. | 0. | 3. |
| ANTHRACITE COAL (1000 TONS) | | | | | | | | |
| ALL USES | 274. | 142. | 100. | 42. | 9. | 4. | 2. | 3. |
| RESIDUAL OIL (1000 BBL) | | | | | | | | |
| ELECTRIC UTILITIES | 835. | 1420. | 1547. | 1375. | 2538. | 2403. | 3113. | 4089. |
| INDUSTRIAL | 676. | 705. | 529. | 728. | 1824. | 1408. | 1234. | 925. |
| COMMERCIAL | 106. | 34. | 196. | 294. | 1148. | 988. | 1061. | 373. |
| DISTILLATE OIL (1000 BBL) | | | | | | | | |
| ELECTRIC UTILITIES | 96. | 12. | 15. | 0. | 184. | 42. | 29. | 15. |
| INDUSTRIAL | 54. | 55. | 49. | 134. | 106. | 102. | 226. | 382. |
| COMMERCIAL-RESIDENTIAL | 1578. | 1461. | 5012. | 6284. | 7704. | 7018. | 7805. | 4884. |
| NATURAL GAS (10E6 CU. FT.) | | | | | | | | |
| ELECTRIC UTILITIES | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| INDUSTRIAL | 0. | 62. | 696. | 829. | 778. | 1165. | 1276. | 1001. |
| PIPELINES | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 26. |
| COMMERCIAL-RESIDENTIAL | 0. | 1144. | 2193. | 3428. | 3709. | 4178. | 4588. | 8447. |
| WOOD (1000 TONS) | | | | | | | | |
| ELECTRIC UTILITIES | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| INDUSTRIAL | 322. | 382. | 411. | 456. | 555. | 558. | 786. | 812. |
| COMMERCIAL | 6. | 5. | 4. | 3. | 3. | 4. | 6. | 9. |
| RESIDENTIAL | 347. | 267. | 216. | 181. | 158. | 185. | 329. | 454. |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE (1000 GAL.) | 128600. | 167644. | 198313. | 243704. | NA | NA | NA | NA |
| DIESEL (1000 GAL.) | 798. | 1134. | 3528. | 5880. | 10374. | 16674. | 24066. | 27552. |
| RURAL VMT (10E6 MILES) | NA | NA | NA | NA | 2967. | 3381. | 4413. | 4334. |
| URBAN VMT (10E6 MILES) | NA | NA | NA | NA | 1469. | 1909. | 2159. | 2093. |
| OTHER | | | | | | | | |
| RAILROADS-COAL(1000 TONS) | 281. | 57. | 7. | 0. | 0. | 0. | 0. | 0. |
| -OIL(1000 BBL) | 97. | 134. | 79. | 7. | 19. | 0. | 2. | 7. |
| COKE PLANTS (1000 TONS COAL) | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| VESSELS-DISTILLATE(1000 BBL) | 1. | 3. | 2. | 0. | 1. | 1. | 1. | 3. |
| -RESIDUAL(1000 BBL) | 0. | 3. | 0. | 0. | 1. | 0. | 0. | 12. |
| OFF HIGHWAY DIESEL (1000 BBL) | 23. | 54. | 31. | 49. | 120. | 57. | 23. | 99. |
| CEMENT PLANT (1000 TONS) | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |

TABLE 1. FUEL CONSUMPTION 1900-1945 FOR THE STATE OF NEW JERSEY

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL(1000 TONS) | | | | | | | | | | |
| ELECTRIC UTILITIES | 306. | 507. | 694. | 926. | 1132. | 1537. | 1522. | 1048. | 1585. | 2196. |
| INDUSTRIAL BOILERS | 1438. | 2190. | 2999. | 3914. | 4322. | 4654. | 3871. | 3009. | 3217. | 3503. |
| COMMERCIAL-RESIDENTIAL | 35. | 56. | 81. | 116. | 126. | 144. | 173. | 166. | 200. | 319. |
| ANTHRACITE COAL (1000 TONS) | | | | | | | | | | |
| ALL USES | 5468. | 7407. | 7989. | 8375. | 8449. | 6309. | 6288. | 4751. | 7906. | 7964. |
| RESIDUAL OIL (1000 BBL) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | 6218. | 4942. | 4369. | 5298. | 3216. |
| INDUSTRIAL | NA | NA | NA | NA | NA | 13395. | 12803. | 12675. | 12561. | 10904. |
| COMMERCIAL | NA | NA | NA | NA | NA | 180. | 307. | 492. | 1138. | 6513. |
| DISTILLATE OIL (1000 BBL) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | 228. | 181. | 160. | 243. | 295. |
| INDUSTRIAL | NA | NA | NA | NA | NA | 741. | 708. | 701. | 928. | 2300. |
| COMMERCIAL -RESIDENTIAL | NA | NA | NA | NA | NA | 966. | 1640. | 2632. | 3494. | 9412. |
| NATURAL GAS (10E6 CU. FT.) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | 0. | 0. | 0. | 0. | 0. | 0. |
| INDUSTRIAL | NA | NA | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| WOOD (1000 TONS) | | | | | | | | | | |
| ALL USES | 2095. | 1990. | 1906. | 1823. | 1739. | 1655. | 1571. | 1508. | 1467. | 1362. |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE(1000 GAL) | NA | NA | NA | NA | NA | 293827. | 574856. | 634163. | 869669. | 635748. |
| DIESEL (1000 GAL.) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL(1000 TONS) | 3275. | 5188. | 7048. | 8483. | 9646. | 7998. | 6876. | 5381. | 6019. | 8955. |
| RAILROADS-OIL(1000 BBL) | NA | NA | NA | NA | NA | 51. | 48. | 39. | 287. | 406. |
| COKE PL (1000 TONS COAL) | 210. | 284. | 412. | 456. | 788. | 1070. | 1166. | 795. | 1200. | 1314. |
| VES FUEL OIL (1000 BBL) | NA | NA | NA | NA | NA | 16109. | 19125. | 15153. | 14102. | 29113. |
| CEMENT PL (1000 TONS) | 220. | 687. | 787. | 297. | NA | NA | NA | NA | NA | 0. |

TABLE 2. FUEL CONSUMPTION 1950-1980 FOR THE STATE OF NEW JERSEY

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL(1000 TONS) | | | | | | | | |
| ELECTRIC UTILITIES | 2054. | 3225. | 3564. | 6829. | 4272. | 2329. | 1926. | 2719. |
| INDUSTRIAL BOILERS | 1702. | 1591. | 1126. | 1579. | 342. | 38. | 38. | 30. |
| COMMERCIAL-RESIDENTIAL | 378. | 238. | 65. | 36. | 3. | 1. | 0. | 56. |
| ANTHRACITE COAL (1000 TONS) | | | | | | | | |
| ALL USES | 5297. | 3345. | 1537. | 1094. | 437. | 103. | 88. | 75. |
| RESIDUAL OIL (1000 BBL) | | | | | | | | |
| ELECTRIC UTILITIES | 15149. | 7094. | 11761. | 12628. | 37826. | 22955. | 26637. | 12400. |
| INDUSTRIAL | 19864. | 23588. | 21263. | 15668. | 19605. | 11940. | 14452. | 17006. |
| COMMERCIAL | 80. | 210. | 4079. | 7642. | 17226. | 11242. | 13451. | 11024. |
| DISTILLATE OIL (1000 BBL) | | | | | | | | |
| ELECTRIC UTILITIES | 655. | 28. | 40. | 42. | 1318. | 3713. | 2627. | 1956. |
| INDUSTRIAL | 5001. | 5172. | 1704. | 2211. | 2046. | 2454. | 2077. | 5820. |
| COMMERCIAL-RESIDENTIAL | 5722. | 5440. | 40724. | 46579. | 52291. | 44141. | 43296. | 33359. |
| NATURAL GAS (10E6 CU. FT.) | | | | | | | | |
| ELECTRIC UTILITIES | 0. | 14064. | 25482. | 23461. | 45560. | 8691. | 770. | 79514. |
| INDUSTRIAL | 649. | 26757. | 38768. | 63680. | 80178. | 52361. | 43217. | 62882. |
| PIPELINES | 0. | 177. | 578. | 451. | 943. | 388. | 504. | 467. |
| COMMERCIAL-RESIDENTIAL | 760723. | 47667. | 85448. | 134612. | 196172. | 182752. | 18352. | 196962. |
| WOOD (1000 TONS) | | | | | | | | |
| ELECTRIC UTILITIES | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| INDUSTRIAL | 584. | 693. | 746. | 996. | 1156. | 1312. | 1633. | 1770. |
| COMMERCIAL | 13. | 10. | 8. | 7. | 11. | 12. | 17. | 21. |
| RESIDENTIAL | 660. | 508. | 411. | 393. | 585. | 640. | 877. | 1098. |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE (1000 GAL.) | 1212368. | 1726035. | 2031383. | 2438713. | NA | NA | NA | NA |
| DIESEL (1000 GAL.) | 27258. | 34860. | 67410. | 133182. | 221130. | 259770. | 279258. | 338772. |
| RURAL VMT (10E6 MILES) | NA | NA | NA | NA | 12187. | 10156. | 12535. | 10515. |
| URBAN VMT (10E6 MILES) | NA | NA | NA | NA | 27705. | 38289. | 39270. | 39749. |
| OTHER | | | | | | | | |
| RAILROADS-COAL(1000 TONS) | 3863. | 784. | 95. | 0. | 0. | 0. | 0. | 0. |
| -OIL(1000 BBL) | 903. | 1785. | 1481. | 1343. | 1365. | 1120. | 871. | 286. |
| COKE PLANTS (1000 TONS COAL) | 2062. | 1377. | 557. | 395. | 334. | 0. | 74. | 0. |
| VESSELS-DISTILLATE(1000 BBL) | 303. | 330. | 340. | 243. | 423. | 413. | 536. | 447. |
| -RESIDUAL(1000 BBL) | 1636. | 2143. | 1114. | 929. | 1513. | 765. | 1772. | 3004. |
| OFF HIGHWAY DIESEL (1000 BBL) | 139. | 228. | 263. | 552. | 805. | 375. | 421. | 665. |
| CEMENT PLANT (1000 TONS) | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |

TABLE 1. FUEL CONSUMPTION 1900-1945 FOR THE STATE OF NEW MEXICO

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL(1000 TONS) | | | | | | | | | | |
| ELECTRIC UTILITIES | 12. | 20. | 27. | 37. | 38. | 31. | 23. | 15. | 21. | 26. |
| INDUSTRIAL BOILERS | 67. | 110. | 162. | 222. | 285. | 368. | 306. | 211. | 194. | 174. |
| COMMERCIAL-RESIDENTIAL | 56. | 96. | 147. | 223. | 245. | 280. | 276. | 188. | 158. | 168. |
| ANTHRACITE COAL (1000 TONS) | | | | | | | | | | |
| ALL USES | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| RESIDUAL OIL (1000 BBL) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | 114. | 90. | 80. | 47. | 80. |
| INDUSTRIAL | NA | NA | NA | NA | NA | 107. | 102. | 101. | 93. | 97. |
| COMMERCIAL | NA | NA | NA | NA | NA | 16. | 27. | 44. | 14. | 23. |
| DISTILLATE OIL (1000 BBL) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | 11. | 9. | 8. | 19. | 36. |
| INDUSTRIAL | NA | NA | NA | NA | NA | 15. | 14. | 14. | 23. | 14. |
| COMMERCIAL -RESIDENTIAL | NA | NA | NA | NA | NA | 11. | 19. | 30. | 92. | 277. |
| NATURAL GAS (10E6 CU. FT.) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | 46. | 96. | 250. | 3048. | 4458. | 6685. |
| INDUSTRIAL | NA | NA | 0. | 0. | 0. | 0. | 3257. | 20836. | 32126. | 64445. |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | 0. | 0. | 0. | NA | 428. | 1939. | 3614. | 7014. |
| WOOD (1000 TONS) | | | | | | | | | | |
| ALL USES | 968. | 920. | 881. | 842. | 804. | 765. | 726. | 697. | 678. | 629. |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE(1000 GAL) | NA | NA | NA | NA | NA | 18706. | 49445. | 60415. | 96903. | 101450. |
| DIESEL (1000 GAL.) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL(1000 TONS) | 370. | 637. | 925. | 1174. | 1336. | 1074. | 896. | 678. | 712. | 970. |
| RAILROADS-OIL(1000 BBL) | NA | NA | NA | NA | NA | 296. | 278. | 228. | 276. | 1207. |
| COKE PL (1000 TONS COAL) | 244. | 360. | 565. | 671. | 594. | 156. | 0. | 0. | 0. | 0. |
| VES FUEL OIL (1000 BBL) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CEMENT PL (1000 TONS) | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |

TABLE 2. FUEL CONSUMPTION 1950-1980 FOR THE STATE OF NEW MEXICO

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL(1000 TONS) | | | | | | | | |
| ELECTRIC UTILITIES | 44. | 11. | 26. | 2151. | 6021. | 7422. | 8753. | 10980. |
| INDUSTRIAL BOILERS | 128. | 120. | 105. | 0. | 10. | 0. | 80. | 7. |
| COMMERCIAL-RESIDENTIAL | 85. | 54. | 42. | 11. | 1. | 0. | 0. | 44. |
| ANTHRACITE COAL (1000 TONS) | | | | | | | | |
| ALL USES | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| RESIDUAL OIL (1000 BBL) | | | | | | | | |
| ELECTRIC UTILITIES | 16. | 5. | 91. | 22. | 81. | 252. | 76. | 79. |
| INDUSTRIAL | 103. | 42. | 12. | 9. | 12. | 723. | 872. | 855. |
| COMMERCIAL | 7. | 25. | 17. | 30. | 3. | 285. | 95. | 0. |
| DISTILLATE OIL (1000 BBL) | | | | | | | | |
| ELECTRIC UTILITIES | 65. | 26. | 21. | 18. | 7. | 1483. | 378. | 276. |
| INDUSTRIAL | 46. | 30. | 322. | 102. | 507. | 835. | 1090. | 718. |
| COMMERCIAL-RESIDENTIAL | 421. | 965. | 737. | 582. | 713. | 1009. | 1433. | 954. |
| NATURAL GAS (10E6 CU. FT.) | | | | | | | | |
| ELECTRIC UTILITIES | 12876. | 21663. | 33701. | 41566. | 54934. | 64239. | 63279. | 56280. |
| INDUSTRIAL | 131597. | 188367. | 147498. | 146039. | 73078. | 57773. | 37977. | 37215. |
| PIPELINES | 2393. | 8559. | 16972. | 24905. | 78285. | 67622. | 60854. | 75214. |
| COMMERCIAL-RESIDENTIAL | 13519. | 18355. | 29376. | 36806. | 63806. | 50626. | 51588. | 53084. |
| WOOD (1000 TONS) | | | | | | | | |
| ELECTRIC UTILITIES | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| INDUSTRIAL | 35. | 42. | 45. | 50. | 43. | 62. | 106. | 93. |
| COMMERCIAL | 10. | 7. | 6. | 5. | 4. | 5. | 6. | 8. |
| RESIDENTIAL | 536. | 413. | 334. | 272. | 235. | 244. | 334. | 446. |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE (1000 GAL.) | 208753. | 313274. | 417759. | 497172. | NA | NA | NA | NA |
| DIESEL (1000 GAL.) | 10626. | 14028. | 33684. | 33936. | 72282. | 106428. | 150108. | 165438. |
| RURAL VMT (10E6 MILES) | NA | NA | NA | NA | 4814. | 5941. | 6825. | 6735. |
| URBAN VMT (10E6 MILES) | NA | NA | NA | NA | 2649. | 3980. | 4682. | 4573. |
| OTHER | | | | | | | | |
| RAILROADS-COAL(1000 TONS) | 529. | 172. | 36. | 18. | 8. | 0. | 0. | 0. |
| -OIL(1000 BBL) | 1028. | 1087. | 1014. | 1821. | 1431. | 1424. | 2352. | 1427. |
| COKE PLANTS (1000 TONS COAL) | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| VESSELS-DISTILLATE(1000 BBL) | 0. | 0. | 1. | 0. | 0. | 0. | 0. | 0. |
| -RESIDUAL(1000 BBL) | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| OFF HIGHWAY DIESEL (1000 BBL) | 214. | 214. | 334. | 693. | 886. | 1015. | 1228. | 1149. |
| CEMENT PLANT (1000 TONS) | 0. | 0. | 374. | 358. | 283. | 359. | 424. | 383. |

TABLE 1. FUEL CONSUMPTION 1900-1945 FOR THE STATE OF NEW YORK

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL(1000 TONS) | | | | | | | | | | |
| ELECTRIC UTILITIES | 875. | 1448. | 1980. | 2643. | 3657. | 5354. | 5444. | 3641. | 5330. | 7109. |
| INDUSTRIAL BOILERS | 5721. | 7759. | 9534. | 11226. | 11718. | 12285. | 10443. | 8580. | 9702. | 11202. |
| COMMERCIAL-RESIDENTIAL | 696. | 987. | 1277. | 1667. | 1741. | 1986. | 2136. | 1719. | 1784. | 2478. |
| ANTHRACITE COAL (1000 TONS) | | | | | | | | | | |
| ALL USES | 13572. | 18385. | 19830. | 20789. | 20973. | 15662. | 12309. | 9301. | 15477. | 13867. |
| RESIDUAL OIL (1000 BBL) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | 6057. | 4814. | 4256. | 5324. | 5997. |
| INDUSTRIAL | NA | NA | NA | NA | NA | 6423. | 6139. | 6078. | 6471. | 6983. |
| COMMERCIAL | NA | NA | NA | NA | NA | 130. | 221. | 355. | 410. | 1719. |
| DISTILLATE OIL (1000 BBL) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | 844. | 671. | 593. | 985. | 1378. |
| INDUSTRIAL | NA | NA | NA | NA | NA | 550. | 525. | 520. | 776. | 2115. |
| COMMERCIAL -RESIDENTIAL | NA | NA | NA | NA | NA | 2023. | 3436. | 5514. | 7482. | 7499. |
| NATURAL GAS (10E6 CU. FT.) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | 5. | 10. | 25. | 38. | 55. | 839. |
| INDUSTRIAL | NA | NA | 1914. | 1467. | 1303. | 448. | 2051. | 4498. | 6935. | 5741. |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | 12248. | 0. | 17824. | 16055. | 16915. | 10868. | 20260. | 23836. |
| WOOD (1000 TONS) | | | | | | | | | | |
| ALL USES | 4350. | 4133. | 3959. | 3785. | 3611. | 3437. | 3263. | 3132. | 3045. | 2828. |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE(1000 GAL) | NA | NA | NA | NA | NA | 804284. | 1465915. | 1546029. | 1876170. | 1338291. |
| DIESEL (1000 GAL.) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL(1000 TONS) | 6322. | 8917. | 10849. | 11746. | 12817. | 10628. | 9138. | 7152. | 8000. | 11901. |
| RAILROADS-OIL(1000 BBL) | NA | NA | NA | NA | NA | 554. | 521. | 427. | 488. | 723. |
| COKE PL (1000 TONS COAL) | 722. | 868. | 1116. | 1087. | 2506. | 4202. | 4825. | 3333. | 5114. | 5692. |
| VES FUEL OIL (1000 BBL) | NA | NA | NA | NA | NA | 7110. | 8441. | 6688. | 3893. | 4255. |
| CEMENT PL (1000 TONS) | 88. | 397. | 620. | 948. | 1106. | 1649. | 1950. | 806. | 1586. | NA |

TABLE 1. FUEL CONSUMPTION 1900-1945 FOR THE STATE OF NEW YORK

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL(1000 TONS) | | | | | | | | | | |
| ELECTRIC UTILITIES | 875. | 1448. | 1980. | 2643. | 3657. | 5354. | 5444. | 3641. | 5330. | 7109. |
| INDUSTRIAL BOILERS | 5721. | 7759. | 9534. | 11226. | 11718. | 12285. | 10443. | 8580. | 9702. | 11202. |
| COMMERCIAL-RESIDENTIAL | 696. | 987. | 1277. | 1667. | 1741. | 1986. | 2136. | 1719. | 1784. | 2478. |
| ANTHRACITE COAL (1000 TONS) | | | | | | | | | | |
| ALL USES | 13572. | 18385. | 19830. | 20789. | 20973. | 15662. | 12309. | 9301. | 15477. | 13867. |
| RESIDUAL OIL (1000 BBL) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | 6057. | 4814. | 4256. | 5324. | 5997. |
| INDUSTRIAL | NA | NA | NA | NA | NA | 6423. | 6139. | 6078. | 6471. | 6983. |
| COMMERCIAL | NA | NA | NA | NA | NA | 130. | 221. | 355. | 410. | 1719. |
| DISTILLATE OIL (1000 BBL) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | 844. | 671. | 593. | 985. | 1378. |
| INDUSTRIAL | NA | NA | NA | NA | NA | 550. | 525. | 520. | 776. | 2115. |
| COMMERCIAL -RESIDENTIAL | NA | NA | NA | NA | NA | 2023. | 3436. | 5514. | 7482. | 7499. |
| NATURAL GAS (10E6 CU. FT.) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | 5. | 10. | 25. | 38. | 55. | 839. |
| INDUSTRIAL | NA | NA | 1914. | 1467. | 1303. | 448. | 2051. | 4498. | 6935. | 5741. |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | 12248. | 0. | 17824. | 16055. | 16915. | 10868. | 20260. | 23936. |
| WOOD (1000 TONS) | | | | | | | | | | |
| ALL USES | 4350. | 4133. | 3959. | 3785. | 3611. | 3437. | 3263. | 3132. | 3045. | 2828. |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE(1000 GAL) | NA | NA | NA | NA | NA | 804284. | 1465915. | 1546029. | 1876170. | 1338291. |
| DIESEL (1000 GAL.) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL(1000 TONS) | 6322. | 8917. | 10849. | 11746. | 12817. | 10628. | 9138. | 7152. | 8000. | 11901. |
| RAILROADS-OIL(1000 BBL) | NA | NA | NA | NA | NA | 554. | 521. | 427. | 488. | 723. |
| COKE PL (1000 TONS COAL) | 722. | 868. | 1116. | 1087. | 2506. | 4202. | 4825. | 3333. | 5114. | 5692. |
| VES FUEL OIL (1000 BBL) | NA | NA | NA | NA | NA | 7110. | 8441. | 6688. | 3893. | 4255. |
| CEMENT PL (1000 TONS) | 88. | 397. | 620. | 948. | 1106. | 1649. | 1950. | 806. | 1586. | NA |

TABLE 1. FUEL CONSUMPTION 1900-1945 FOR THE STATE OF NORTH CAROLINA

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL(1000 TONS) | | | | | | | | | | |
| ELECTRIC UTILITIES | 57. | 94. | 129. | 172. | 344. | 710. | 876. | 693. | 1196. | 1884. |
| INDUSTRIAL BOILERS | 224. | 384. | 578. | 813. | 1275. | 1979. | 2052. | 1889. | 2359. | 2973. |
| COMMERCIAL-RESIDENTIAL | 239. | 428. | 673. | 1036. | 1149. | 1311. | 1600. | 1549. | 1886. | 3017. |
| ANTHRACITE COAL (1000 TONS) | | | | | | | | | | |
| ALL USES | 40. | 55. | 59. | 62. | 63. | 47. | NA | NA | NA | NA |
| RESIDUAL OIL (1000 BBL) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDUSTRIAL | NA | NA | NA | NA | NA | 59. | 57. | 56. | 150. | 182. |
| COMMERCIAL | NA | NA | NA | NA | NA | 12. | 21. | 34. | 60. | 51. |
| DISTILLATE OIL (1000 BBL) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | 100. | 79. | 70. | 114. | 206. |
| INDUSTRIAL | NA | NA | NA | NA | NA | 24. | 23. | 23. | 87. | 86. |
| COMMERCIAL -RESIDENTIAL | NA | NA | NA | NA | NA | 138. | 234. | 375. | 688. | 1003. |
| NATURAL GAS (10E6 CU. FT.) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | 0. | 0. | 0. | 0. | 0. | 0. |
| INDUSTRIAL | NA | NA | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| WOOD (1000 TONS) | | | | | | | | | | |
| ALL USES | 9155. | 8697. | 8331. | 7965. | 7599. | 7232. | 6866. | 6592. | 6409. | 5951. |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE(1000 GAL) | NA | NA | NA | NA | NA | 162178. | 251479. | 307607. | 444953. | 439737. |
| DIESEL (1000 GAL.) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL(1000 TONS) | 522. | 937. | 1401. | 1818. | 2197. | 1929. | 1750. | 1441. | 1662. | 2515. |
| RAILROADS-OIL(1000 BBL) | NA | NA | NA | NA | NA | 36. | 34. | 28. | 99. | 359. |
| COKE PL (1000 TONS COAL) | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| VES FUEL OIL (1000 BBL) | NA | NA | NA | NA | NA | 12. | 14. | 11. | 22. | 263. |
| CEMENT PL (1000 TONS) | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |

TABLE 2. FUEL CONSUMPTION 1950-1980 FOR THE STATE OF NORTH CAROLINA

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL(1000 TONS) | | | | | | | | |
| ELECTRIC UTILITIES | 3227. | 4728. | 5488. | 9595. | 19075. | 19825. | 19824. | 22953. |
| INDUSTRIAL BOILERS | 2389. | 2233. | 2221. | 2278. | 2106. | 1245. | 1521. | 1372. |
| COMMERCIAL-RESIDENTIAL | 2059. | 1295. | 995. | 541. | 515. | 245. | 60. | 172. |
| ANTHRACITE COAL (1000 TONS) | | | | | | | | |
| ALL USES | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| RESIDUAL OIL (1000 BBL) | | | | | | | | |
| ELECTRIC UTILITIES | 86. | 59. | 49. | 49. | 603. | 29. | 593. | 39. |
| INDUSTRIAL | 436. | 1323. | 3037. | 3319. | 4279. | 5461. | 10214. | 8483. |
| COMMERCIAL | 386. | 632. | 734. | 324. | 1450. | 1393. | 1909. | 537. |
| DISTILLATE OIL (1000 BBL) | | | | | | | | |
| ELECTRIC UTILITIES | 249. | 103. | 24. | 25. | 1387. | 329. | 1342. | 496. |
| INDUSTRIAL | 428. | 469. | 596. | 1013. | 876. | 2336. | 3048. | 2029. |
| COMMERCIAL-RESIDENTIAL | 4237. | 9063. | 19768. | 21039. | 24035. | 14668. | 13608. | 11607. |
| NATURAL GAS (10E6 CU. FT.) | | | | | | | | |
| ELECTRIC UTILITIES | 0. | 0. | 4660. | 2620. | 21126. | 101. | 4. | 1702. |
| INDUSTRIAL | 0. | 6757. | 28014. | 49669. | 75065. | 62094. | 23948. | 85611. |
| PIPELINES | 0. | 2024. | 2438. | 4272. | 6151. | 3546. | 2599. | 5868. |
| COMMERCIAL-RESIDENTIAL | 0. | 3863. | 12264. | 21858. | 48885. | 49081. | 55438. | 60135. |
| WOOD (1000 TONS) | | | | | | | | |
| ELECTRIC UTILITIES | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| INDUSTRIAL | 1319. | 1564. | 1685. | 2105. | 2618. | 2621. | 4036. | 4050. |
| COMMERCIAL | 77. | 59. | 48. | 34. | 23. | 23. | 36. | 50. |
| RESIDENTIAL | 4097. | 3158. | 2553. | 1775. | 1191. | 1217. | 1880. | 2621. |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE (1000 GAL.) | 870920. | 1204498. | 1455179. | 1843344. | NA | NA | NA | NA |
| DIESEL (1000 GAL.) | 13944. | 16758. | 35826. | 64722. | 173040. | 244398. | 352296. | 377454. |
| RURAL VMT (10E6 MILES) | NA | NA | NA | NA | 20079. | 22955. | 25687. | 24166. |
| URBAN VMT (10E6 MILES) | NA | NA | NA | NA | 9545. | 13445. | 16813. | 17180. |
| OTHER | | | | | | | | |
| RAILROADS-COAL(1000 TONS) | 1381. | 430. | 87. | 0. | 0. | 0. | 0. | 0. |
| -OIL(1000 BBL) | 1076. | 2191. | 1829. | 2567. | 1792. | 1537. | 1390. | 1482. |
| COKE PLANTS (1000 TONS COAL) | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| VESSELS-DISTILLATE(1000 BBL) | 10. | 13. | 20. | 9. | 15. | 19. | 20. | 31. |
| -RESIDUAL(1000 BBL) | 7. | 38. | 14. | 37. | 50. | 44. | 22. | 14. |
| OFF HIGHWAY DIESEL (1000 BBL) | 412. | 525. | 368. | 280. | 671. | 831. | 1159. | 494. |
| CEMENT PLANT (1000 TONS) | 0. | 0. | 0. | 535. | 374. | 387. | 873. | 768. |

TABLE 1. FUEL CONSUMPTION 1900-1945 FOR THE STATE OF NORTH DAKOTA

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL(1000 TONS) | | | | | | | | | | |
| ELECTRIC UTILITIES | 60. | 99. | 136. | 181. | 207. | 219. | 200. | 141. | 220. | 314. |
| INDUSTRIAL BOILERS | 95. | 193. | 319. | 477. | 447. | 304. | 217. | 196. | 242. | 302. |
| COMMERCIAL-RESIDENTIAL | 139. | 290. | 497. | 813. | 918. | 1047. | 1085. | 818. | 790. | 1013. |
| ANTHRACITE COAL (1000 TONS) | | | | | | | | | | |
| ALL USES | 235. | 318. | 343. | 360. | 363. | 271. | NA | NA | NA | NA |
| RESIDUAL OIL (1000 BBL) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | 13. | 10. | 9. | 18. | NA |
| INDUSTRIAL | NA | NA | NA | NA | NA | 10. | 9. | 9. | NA | 2. |
| COMMERCIAL | NA | NA | NA | NA | NA | 9. | 16. | 25. | NA | 19. |
| DISTILLATE OIL (1000 BBL) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | 30. | 24. | 21. | 14. | 50. |
| INDUSTRIAL | NA | NA | NA | NA | NA | 5. | 5. | 5. | 2. | 26. |
| COMMERCIAL -RESIDENTIAL | NA | NA | NA | NA | NA | 23. | 39. | 63. | 257. | 265. |
| NATURAL GAS (10E6 CU. FT.) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | 0. | 0. | 0. | NA | NA | 234. |
| INDUSTRIAL | NA | NA | 1. | NA | NA | 0. | NA | NA | NA | NA |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | 17. | 2. | 1. | NA | NA | NA | NA | NA |
| WOOD (1000 TONS) | | | | | | | | | | |
| ALL USES | 75. | 71. | 68. | 65. | 62. | 59. | 56. | 54. | 53. | 49. |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE(1000 GAL) | NA | NA | NA | NA | NA | 52355. | 65907. | 81312. | 85779. | 72263. |
| DIESEL (1000 GAL.) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL(1000 TONS) | 400. | 846. | 1396. | 1934. | 2263. | 1820. | 1516. | 1148. | 1205. | 1642. |
| RAILROADS-OIL(1000 BBL) | NA | NA | NA | NA | NA | 1. | 1. | 1. | 34. | 679. |
| COKE PL (1000 TONS COAL) | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| VES FUEL OIL (1000 BBL) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CEMENT PL (1000 TONS) | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |

TABLE 2. FUEL CONSUMPTION 1950-1980 FOR THE STATE OF NORTH DAKOTA

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL(1000 TONS) | | | | | | | | |
| ELECTRIC UTILITIES | 1004. | 904. | 1014. | 964. | 2887. | 5069. | 8870. | 12255. |
| INDUSTRIAL BOILERS | 369. | 345. | 421. | 341. | 445. | 480. | 662. | 588. |
| COMMERCIAL-RESIDENTIAL | 860. | 541. | 542. | 271. | 177. | 101. | 69. | 143. |
| ANTHRACITE COAL (1000 TONS) | | | | | | | | |
| ALL USES | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| RESIDUAL OIL (1000 BBL) | | | | | | | | |
| ELECTRIC UTILITIES | 2. | 5. | 5. | 0. | 25. | 0. | 0. | 0. |
| INDUSTRIAL | 17. | 326. | 514. | 589. | 561. | 406. | 400. | 274. |
| COMMERCIAL | 20. | 20. | 76. | 220. | 69. | 793. | 544. | 401. |
| DISTILLATE OIL (1000 BBL) | | | | | | | | |
| ELECTRIC UTILITIES | 117. | 47. | 22. | 0. | 8. | 26. | 94. | 84. |
| INDUSTRIAL | 65. | 72. | 42. | 198. | 159. | 113. | 63. | 419. |
| COMMERCIAL-RESIDENTIAL | 859. | 1250. | 3203. | 3443. | 3134. | 2037. | 1339. | 2439. |
| NATURAL GAS (10E6 CU. FT.) | | | | | | | | |
| ELECTRIC UTILITIES | 39. | 82. | 103. | 0. | 362. | 157. | 21. | 15. |
| INDUSTRIAL | 3390. | 7843. | 8538. | 13165. | 1782. | 1975. | 2460. | 975. |
| PIPELINES | 1. | 6. | 7. | 2. | 14072. | 12069. | 12324. | 1188. |
| COMMERCIAL-RESIDENTIAL | 2274. | 3864. | 6669. | 11555. | 16501. | 22625. | 24262. | 20670. |
| WOOD (1000 TONS) | | | | | | | | |
| ELECTRIC UTILITIES | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| INDUSTRIAL | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| COMMERCIAL | 2. | 1. | 1. | 0. | 0. | 0. | 1. | 1. |
| RESIDENTIAL | 43. | 33. | 27. | 19. | 22. | 26. | 30. | 33. |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE (1000 GAL.) | 134913. | 172281. | 204355. | 256648. | NA | NA | NA | NA |
| DIESEL (1000 GAL.) | 8442. | 12096. | 7728. | 13860. | 55188. | 41664. | 55398. | 77658. |
| RURAL VMT (10E6 MILES) | NA | NA | NA | NA | 3114. | 3591. | 4169. | 4071. |
| URBAN VMT (10E6 MILES) | NA | NA | NA | NA | 736. | 911. | 1118. | 1213. |
| OTHER | | | | | | | | |
| RAILROADS-COAL(1000 TONS) | 895. | 291. | 61. | 30. | 14. | 0. | 0. | 0. |
| -OIL(1000 BBL) | 530. | 569. | 407. | 585. | 617. | 807. | 1128. | 1302. |
| COKE PLANTS (1000 TONS COAL) | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| VESSELS-DISTILLATE(1000 BBL) | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| -RESIDUAL(1000 BBL) | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| OFF HIGHWAY DIESEL (1000 BBL) | 206. | 279. | 769. | 729. | 445. | 309. | 136. | 153. |
| CEMENT PLANT (1000 TONS) | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |

TABLE 1. FUEL CONSUMPTION 1900-1945 FOR THE STATE OF OHIO

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL(1000 TONS) | | | | | | | | | | |
| ELECTRIC UTILITIES | 1004. | 1663. | 2274. | 3034. | 3653. | 4293. | 4309. | 3256. | 5407. | 8225. |
| INDUSTRIAL BOILERS | 10215. | 13746. | 16749. | 19552. | 20255. | 21099. | 18041. | 15021. | 17207. | 20109. |
| COMMERCIAL-RESIDENTIAL | 2825. | 3973. | 5096. | 6598. | 6869. | 7836. | 8950. | 7924. | 8994. | 13588. |
| ANTHRACITE COAL (1000 TONS) | | | | | | | | | | |
| ALL USES | 392. | 531. | 572. | 600. | 605. | 452. | 90. | 68. | 114. | 110. |
| RESIDUAL OIL (1000 BBL) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | 47. | 37. | 33. | 52. | 48. |
| INDUSTRIAL | NA | NA | NA | NA | NA | 6453. | 6167. | 6106. | 6395. | 11059. |
| COMMERCIAL | NA | NA | NA | NA | NA | 103. | 175. | 281. | 202. | 83. |
| DISTILLATE OIL (1000 BBL) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | 7. | 6. | 5. | 60. | 84. |
| INDUSTRIAL | NA | NA | NA | NA | NA | 342. | 327. | 324. | 595. | 1825. |
| COMMERCIAL -RESIDENTIAL | NA | NA | NA | NA | NA | 102. | 174. | 279. | 502. | 900. |
| NATURAL GAS (10E6 CU. FT.) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | 784. | 1639. | 4275. | 662. | 968. | 314. |
| INDUSTRIAL | NA | NA | 47535. | 69637. | 40132. | 28247. | 34937. | 32790. | 50558. | 68008. |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | 60540. | 77087. | 96740. | 83722. | 90879. | 42536. | 79298. | 104250. |
| WOOD (1000 TONS) | | | | | | | | | | |
| ALL USES | 4388. | 4169. | 3993. | 3818. | 3642. | 3467. | 3291. | 3160. | 3072. | 2852. |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE(1000 GAL) | NA | NA | NA | NA | NA | 585083. | 929786. | 968530. | 1323196. | 1122857. |
| DIESEL (1000 GAL.) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL(1000 TONS) | 5660. | 7922. | 9558. | 10256. | 11148. | 9245. | 7948. | 6221. | 6958. | 10350. |
| RAILROADS-OIL(1000 BBL) | NA | NA | NA | NA | NA | 105. | 99. | 81. | 177. | 603. |
| COKE PL (1000 TONS COAL) | 2856. | 3406. | 4342. | 4183. | 6716. | 9019. | 10134. | 7318. | 11765. | 13754. |
| VES FUEL OIL (1000 BBL) | NA | NA | NA | NA | NA | 55. | 66. | 52. | 109. | 108. |
| CEMENT PL (1000 TONS) | 100. | 247. | 287. | 367. | 365. | 1074. | 1623. | 731. | 1253. | 866. |

TABLE 2. FUEL CONSUMPTION 1950-1980 FOR THE STATE OF OHIO

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL(1000 TONS) | | | | | | | | |
| ELECTRIC UTILITIES | 12315. | 16270. | 21558. | 24923. | 37145. | 46412. | 48833. | 50627. |
| INDUSTRIAL BOILERS | 13638. | 12746. | 14420. | 16957. | 15643. | 8335. | 7427. | 5496. |
| COMMERCIAL-RESIDENTIAL | 11209. | 7050. | 3364. | 2224. | 1888. | 744. | 370. | 556. |
| ANTHRACITE COAL (1000 TONS) | | | | | | | | |
| ALL USES | 73. | 138. | 166. | 142. | 173. | 65. | 56. | 97. |
| RESIDUAL OIL (1000 BBL) | | | | | | | | |
| ELECTRIC UTILITIES | 349. | 71. | 112. | 98. | 796. | 611. | 1925. | 79. |
| INDUSTRIAL | 16371. | 17057. | 10310. | 8891. | 4351. | 5526. | 7419. | 5478. |
| COMMERCIAL | 86. | 451. | 642. | 454. | 540. | 3089. | 3364. | 381. |
| DISTILLATE OIL (1000 BBL) | | | | | | | | |
| ELECTRIC UTILITIES | 206. | 182. | 124. | 147. | 790. | 3418. | 5185. | 1858. |
| INDUSTRIAL | 2732. | 3079. | 2550. | 2278. | 3206. | 5710. | 8154. | 6379. |
| COMMERCIAL-RESIDENTIAL | 2502. | 4197. | 14833. | 19164. | 20337. | 18486. | 23756. | 11251. |
| NATURAL GAS (10E6 CU. FT.) | | | | | | | | |
| ELECTRIC UTILITIES | 2490. | 4403. | 2992. | 2133. | 21449. | 6139. | 3141. | 4706. |
| INDUSTRIAL | 108931. | 162190. | 228172. | 335210. | 372968. | 341612. | 324903. | 318938. |
| PIPELINES | 3213. | 4653. | 9098. | 11057. | 15132. | 11951. | 12399. | 13370. |
| COMMERCIAL-RESIDENTIAL | 212450. | 334022. | 469754. | 538880. | 643384. | 597114. | 589150. | 6460. |
| WOOD (1000 TONS) | | | | | | | | |
| ELECTRIC UTILITIES | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| INDUSTRIAL | 751. | 890. | 959. | 1287. | 1464. | 1546. | 2223. | 2201. |
| COMMERCIAL | 35. | 27. | 22. | 18. | 20. | 21. | 34. | 47. |
| RESIDENTIAL | 1847. | 1424. | 1151. | 936. | 1075. | 1120. | 1788. | 2456. |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE (1000 GAL.) | 2060822. | 2716598. | 3145995. | 3745815. | NA | NA | NA | NA |
| DIESEL (1000 GAL.) | 25410. | 32592. | 63042. | 166320. | 337680. | 513282. | 634578. | 697368. |
| RURAL VMT (10E6 MILES) | NA | NA | NA | NA | 25539. | 29528. | 31445. | 30636. |
| URBAN VMT (10E6 MILES) | NA | NA | NA | NA | 30475. | 34606. | 40584. | 41364. |
| OTHER | | | | | | | | |
| RAILROADS-COAL(1000 TONS) | 4464. | 906. | 109. | 0. | 0. | 0. | 0. | 0. |
| -OIL(1000 BBL) | 2456. | 4818. | 6108. | 5488. | 3625. | 3820. | 3985. | 7598. |
| COKE PLANTS (1000 TONS COAL) | 14692. | 16832. | 11739. | 10891. | 12699. | 12528. | 11282. | 10622. |
| VESSELS-DISTILLATE(1000 BBL) | 40. | 27. | 43. | 65. | 22. | 72. | 60. | 33. |
| -RESIDUAL(1000 BBL) | 34. | 45. | 63. | 112. | 104. | 146. | 161. | 64. |
| OFF HIGHWAY DIESEL (1000 BBL) | 408. | 895. | 1189. | 1973. | 2972. | 2042. | 2541. | 2593. |
| CEMENT PLANT (1000 TONS) | 1994. | 2626. | 3168. | 2745. | 2237. | 2292. | 2014. | 1693. |

TABLE 1. FUEL CONSUMPTION 1900-1945 FOR THE STATE OF OKLAHOMA

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL(1000 TONS) | | | | | | | | | | |
| ELECTRIC UTILITIES | 30. | 50. | 69. | 92. | 172. | 340. | 353. | 208. | 255. | 265. |
| INDUSTRIAL BOILERS | 139. | 281. | 465. | 696. | 693. | 559. | 389. | 280. | 273. | 268. |
| COMMERCIAL-RESIDENTIAL | 165. | 343. | 588. | 962. | 1086. | 1239. | 1217. | 821. | 683. | 709. |
| ANTHRACITE COAL (1000 TONS) | | | | | | | | | | |
| ALL USES | 0. | 0. | 0. | 1. | 1. | 0. | NA | NA | NA | NA |
| RESIDUAL OIL (1000 BBL) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | 185. | 147. | 130. | 165. | 298. |
| INDUSTRIAL | NA | NA | NA | NA | NA | 2596. | 2481. | 2456. | 2057. | 2071. |
| COMMERCIAL | NA | NA | NA | NA | NA | 15. | 26. | 41. | 49. | 34. |
| DISTILLATE OIL (1000 BBL) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | 36. | 28. | 25. | 29. | 31. |
| INDUSTRIAL | NA | NA | NA | NA | NA | 27. | 26. | 26. | 16. | 25. |
| COMMERCIAL -RESIDENTIAL | NA | NA | NA | NA | NA | 45. | 77. | 124. | 224. | 557. |
| NATURAL GAS (10E6 CU. FT.) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | 1224. | 2560. | 6678. | 8114. | 11867. | 22296. |
| INDUSTRIAL | NA | NA | 22483. | 55644. | 107049. | 192866. | 285967. | 120151. | 185255. | 201928. |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | 5397. | 10047. | 19640. | 16592. | 28206. | 18068. | 33684. | 47999. |
| WOOD (1000 TONS) | | | | | | | | | | |
| ALL USES | 1518. | 1442. | 1382. | 1321. | 1260. | 1199. | 1139. | 1093. | 1063. | 987. |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE(1000 GAL) | NA | NA | NA | NA | NA | 159970. | 301797. | 307829. | 382228. | 310528. |
| DIESEL (1000 GAL.) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL(1000 TONS) | 522. | 1105. | 1821. | 2524. | 2954. | 2376. | 1980. | 1499. | 1573. | 2144. |
| RAILROADS-OIL(1000 BBL) | NA | NA | NA | NA | NA | 7637. | 7180. | 5885. | 5741. | 5932. |
| COKE PL (1000 TONS COAL) | 0. | 0. | 0. | 0. | 0. | 0. | 13. | 25. | 64. | 105. |
| VES FUEL OIL (1000 BBL) | NA | NA | NA | NA | NA | NA | NA | NA | NA | 6. |
| CEMENT PL (1000 TONS) | 0. | 0. | NA | NA | NA | NA | NA | NA | NA | NA |

TABLE 2. FUEL CONSUMPTION 1950-1980 FOR THE STATE OF OKLAHOMA

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL(1000 TONS) | | | | | | | | |
| ELECTRIC UTILITIES | 43. | 1. | 0. | 1. | 0. | 0. | 1478. | 8002. |
| INDUSTRIAL BOILERS | 0. | 440. | 262. | 297. | 0. | 17. | 370. | 424. |
| COMMERCIAL-RESIDENTIAL | 33. | 21. | 12. | 4. | 0. | 2. | 1. | 30. |
| ANTHRACITE COAL (1000 TONS) | | | | | | | | |
| ALL USES | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| RESIDUAL OIL (1000 BBL) | | | | | | | | |
| ELECTRIC UTILITIES | 213. | 15. | 5. | 2. | 3. | 123. | 0. | 0. |
| INDUSTRIAL | 1216. | 1265. | 1367. | 534. | 521. | 485. | 923. | 703. |
| COMMERCIAL | 10. | 15. | 16. | 12. | 81. | 114. | 64. | 30. |
| DISTILLATE OIL (1000 BBL) | | | | | | | | |
| ELECTRIC UTILITIES | 224. | 45. | 50. | 50. | 44. | 532. | 402. | 18. |
| INDUSTRIAL | 188. | 126. | 205. | 114. | 131. | 1314. | 1777. | 1179. |
| COMMERCIAL-RESIDENTIAL | 1194. | 1274. | 574. | 1274. | 1208. | 2037. | 3298. | 452. |
| NATURAL GAS (10E6 CU. FT.) | | | | | | | | |
| ELECTRIC UTILITIES | 35266. | 64780. | 82820. | 126345. | 234749. | 300848. | 347634. | 329940. |
| INDUSTRIAL | 221969. | 254387. | 170386. | 258625. | 119844. | 142812. | 191712. | 185968. |
| PIPELINES | 7141. | 6587. | 8980. | 12556. | 121195. | 103432. | 101128. | 82676. |
| COMMERCIAL-RESIDENTIAL | 57683. | 73083. | 88628. | 92067. | 121381. | 121727. | 129775. | 123734. |
| WOOD (1000 TONS) | | | | | | | | |
| ELECTRIC UTILITIES | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| INDUSTRIAL | 37. | 44. | 47. | 50. | 41. | 294. | 454. | 512. |
| COMMERCIAL | 16. | 12. | 10. | 7. | 7. | 8. | 12. | 16. |
| RESIDENTIAL | 858. | 662. | 535. | 385. | 358. | 396. | 647. | 844. |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE (1000 GAL.) | 565236. | 753103. | 903714. | 1120107. | NA | NA | NA | NA |
| DIESEL (1000 GAL.) | 11886. | 13776. | 29652. | 32550. | 94626. | 165060. | 249354. | 300048. |
| RURAL VMT (10E6 MILES) | NA | NA | NA | NA | 10034. | 11420. | 14355. | 14780. |
| URBAN VMT (10E6 MILES) | NA | NA | NA | NA | 8037. | 11304. | 12489. | 12630. |
| OTHER | | | | | | | | |
| RAILROADS-COAL(1000 TONS) | 1168. | 379. | 80. | 39. | 18. | 0. | 0. | 0. |
| -OIL(1000 BBL) | 3926. | 1288. | 616. | 778. | 734. | 718. | 587. | 760. |
| COKE PLANTS (1000 TONS COAL) | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| VESSELS-DISTILLATE(1000 BBL) | 0. | 11. | 0. | 65. | 7. | 0. | 4. | 1. |
| -RESIDUAL(1000 BBL) | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| OFF HIGHWAY DIESEL (1000 BBL) | 164. | 179. | 660. | 751. | 1344. | 1248. | 2311. | 1133. |
| CEMENT PLANT (1000 TONS) | 1037. | 1311. | 1488. | 1628. | 1244. | 1332. | 1656. | 1643. |

TABLE 1. FUEL CONSUMPTION 1900-1945 FOR THE STATE OF OREGON

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL(1000 TONS) | | | | | | | | | | |
| ELECTRIC UTILITIES | 0. | 0. | 0. | 0. | 0. | 1. | 1. | 1. | 1. | 1. |
| INDUSTRIAL BOILERS | 84. | 143. | 210. | 291. | 257. | 157. | 136. | 167. | 250. | 355. |
| COMMERCIAL-RESIDENTIAL | 70. | 122. | 188. | 286. | 316. | 360. | 387. | 312. | 324. | 450. |
| ANTHRACITE COAL (1000 TONS) | | | | | | | | | | |
| ALL USES | 0. | 0. | 0. | 0. | 0. | 0. | NA | NA | NA | NA |
| RESIDUAL OIL (1000 BBL) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | 2049. | 1629. | 1440. | 1216. | 2103. |
| INDUSTRIAL | NA | NA | NA | NA | NA | 1766. | 1688. | 1671. | 1597. | 1829. |
| COMMERCIAL | NA | NA | NA | NA | NA | 83. | 141. | 226. | 276. | 891. |
| DISTILLATE OIL (1000 BBL) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | 1523. | 1210. | 1070. | 18. | 204. |
| INDUSTRIAL | NA | NA | NA | NA | NA | 31. | 29. | 29. | 13. | 113. |
| COMMERCIAL -RESIDENTIAL | NA | NA | NA | NA | NA | 88. | 150. | 241. | 422. | 551. |
| NATURAL GAS (10E6 CU. FT.) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | 0. | 0. | 0. | 0. | 0. | 0. |
| INDUSTRIAL | NA | NA | 0. | 0. | NA | 0. | 0. | 0. | 0. | 0. |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | 0. | 27. | 0. | 0. | 0. | 0. | 0. | 0. |
| WOOD (1000 TONS) | | | | | | | | | | |
| ALL USES | 7722. | 7336. | 7027. | 6718. | 6409. | 6100. | 5791. | 5560. | 5405. | 5019. |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE(1000 GAL) | NA | NA | NA | NA | NA | 101058. | 157623. | 164508. | 235787. | 236002. |
| DIESEL (1000 GAL.) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL(1000 TONS) | 296. | 518. | 760. | 972. | 1109. | 892. | 743. | 563. | 590. | 805. |
| RAILROADS-OIL(1000 BBL) | NA | NA | NA | NA | NA | 6809. | 6402. | 5247. | 4962. | 8879. |
| COKE PL (1000 TONS COAL) | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| VES FUEL OIL (1000 BBL) | NA | NA | NA | NA | NA | 360. | 428. | 339. | 407. | 2009. |
| CEMENT PL (1000 TONS) | 0. | 0. | 0. | 0. | NA | NA | NA | NA | NA | NA |

TABLE 2. FUEL CONSUMPTION 1950-1980 FOR THE STATE OF OREGON

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL(1000 TONS) | | | | | | | | |
| ELECTRIC UTILITIES | 0. | 0. | 0. | 0. | 0. | 0. | 49. | 1091. |
| INDUSTRIAL BOILERS | 159. | 149. | 208. | 167. | 59. | 98. | 223. | 226. |
| COMMERCIAL-RESIDENTIAL | 318. | 200. | 114. | 92. | 32. | 9. | 5. | 17. |
| ANTHRACITE COAL (1000 TONS) | | | | | | | | |
| ALL USES | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| RESIDUAL OIL (1000 BBL) | | | | | | | | |
| ELECTRIC UTILITIES | 2889. | 2960. | 11. | 5. | 79. | 40. | 0. | 0. |
| INDUSTRIAL | 2357. | 2784. | 1855. | 1577. | 2118. | 1673. | 1971. | 2515. |
| COMMERCIAL | 210. | 320. | 2045. | 2445. | 3474. | 2330. | 1262. | 882. |
| DISTILLATE OIL (1000 BBL) | | | | | | | | |
| ELECTRIC UTILITIES | 33. | 30. | 0. | 0. | 0. | 325. | 38. | 366. |
| INDUSTRIAL | 551. | 812. | 989. | 1034. | 1263. | 1859. | 2878. | 1407. |
| COMMERCIAL-RESIDENTIAL | 1117. | 1617. | 5923. | 7302. | 6478. | 4641. | 4420. | 3925. |
| NATURAL GAS (10E6 CU. FT.) | | | | | | | | |
| ELECTRIC UTILITIES | 0. | 0. | 701. | 0. | 1010. | 3. | 0. | 321. |
| INDUSTRIAL | 0. | 0. | 20090. | 41122. | 57664. | 57332. | 47707. | 39202. |
| PIPELINES | 0. | 0. | 55. | 682. | 5508. | 7886. | 8701. | 5620. |
| COMMERCIAL-RESIDENTIAL | 0. | 0. | 9893. | 16455. | 31102. | 44645. | 29702. | 33560. |
| WOOD (1000 TONS) | | | | | | | | |
| ELECTRIC UTILITIES | 183. | 87. | 25. | 30. | 51. | 0. | 0. | 0. |
| INDUSTRIAL | 1698. | 2014. | 2169. | 2564. | 2768. | 2777. | 3681. | 3213. |
| COMMERCIAL | 32. | 25. | 20. | 15. | 10. | 11. | 14. | 19. |
| RESIDENTIAL | 1720. | 1326. | 1072. | 769. | 535. | 569. | 761. | 991. |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE (1000 GAL.) | 468395. | 569228. | 662027. | 860916. | NA | NA | NA | NA |
| DIESEL (1000 GAL.) | 29988. | 22974. | 32508. | 56448. | 109620. | 144396. | 225288. | 239988. |
| RURAL VMT (10E6 MILES) | NA | NA | NA | NA | 7769. | 10506. | 12655. | 12177. |
| URBAN VMT (10E6 MILES) | NA | NA | NA | NA | 5756. | 5432. | 7182. | 6911. |
| OTHER | | | | | | | | |
| RAILROADS-COAL(1000 TONS) | 439. | 143. | 30. | 15. | 7. | 0. | 0. | 0. |
| -OIL(1000 BBL) | 5159. | 2740. | 1954. | 1937. | 2007. | 2229. | 2949. | 2895. |
| COKE PLANTS (1000 TONS COAL) | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| VESSELS-DISTILLATE(1000 BBL) | 41. | 47. | 59. | 111. | 75. | 90. | 114. | 36. |
| -RESIDUAL(1000 BBL) | 202. | 263. | 215. | 116. | 217. | 79. | 458. | 276. |
| OFF HIGHWAY DIESEL (1000 BBL) | 487. | 829. | 1084. | 1246. | 553. | 384. | 720. | 1496. |
| CEMENT PLANT (1000 TONS) | 333. | 367. | 404. | 704. | 410. | 475. | 557. | 568. |

TABLE 1. FUEL CONSUMPTION 1900-1945 FOR THE STATE OF PENNSYLVANIA

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL(1000 TONS) | | | | | | | | | | |
| ELECTRIC UTILITIES | 692. | 1146. | 1567. | 2091. | 3258. | 5471. | 5850. | 3977. | 5932. | 8086. |
| INDUSTRIAL BOILERS | 8980. | 13979. | 19495. | 25830. | 29361. | 32785. | 26853. | 19798. | 19913. | 20220. |
| COMMERCIAL-RESIDENTIAL | 682. | 1108. | 1619. | 2363. | 2574. | 2935. | 3275. | 2799. | 3081. | 4527. |
| ANTHRACITE COAL (1000 TONS) | | | | | | | | | | |
| ALL USES | 15207. | 20600. | 22218. | 23293. | 23499. | 17548. | 6816. | 5150. | 8570. | 9674. |
| RESIDUAL OIL (1000 BBL) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | 1368. | 1087. | 961. | 1598. | 3333. |
| INDUSTRIAL | NA | NA | NA | NA | NA | 14124. | 13499. | 13365. | 12971. | 20908. |
| COMMERCIAL | NA | NA | NA | NA | NA | 201. | 342. | 549. | 994. | 4330. |
| DISTILLATE OIL (1000 BBL) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | 152. | 121. | 107. | 18. | 204. |
| INDUSTRIAL | NA | NA | NA | NA | NA | 830. | 793. | 785. | 871. | 3398. |
| COMMERCIAL -RESIDENTIAL | NA | NA | NA | NA | NA | 234. | 398. | 639. | 1038. | 3144. |
| NATURAL GAS (10E6 CU. FT.) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | 11. | 24. | 62. | 278. | 406. | 12. |
| INDUSTRIAL | NA | NA | 125471. | 125019. | 95236. | 63678. | 56182. | 46689. | 71988. | 93413. |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | 43405. | 51348. | 66161. | 55797. | 51974. | 26196. | 48836. | 55679. |
| WOOD (1000 TONS) | | | | | | | | | | |
| ALL USES | 5647. | 5364. | 5138. | 4913. | 4687. | 4461. | 4235. | 4066. | 3953. | 3670. |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE(1000 GAL) | NA | NA | NA | NA | NA | 400100. | 898739. | 1130137. | 1517775. | 1169456. |
| DIESEL (1000 GAL.) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL(1000 TONS) | 2348. | 3803. | 5261. | 6431. | 7353. | 6098. | 5243. | 4103. | 4590. | 6827. |
| RAILROADS-OIL(1000 BBL) | NA | NA | NA | NA | NA | 309. | 290. | 238. | 258. | 653. |
| COKE PL (1000 TONS COAL) | 13337. | 18397. | 27285. | 30848. | 34886. | 26782. | 24187. | 16962. | 26456. | 29975. |
| VES FUEL OIL (1000 BBL) | NA | NA | NA | NA | NA | 3092. | 3670. | 2908. | 2170. | 3837. |
| CEMENT PL (1000 TONS) | 937. | 2597. | 5015. | 5386. | 5315. | 7961. | 7115. | 2914. | 5048. | 2926. |

TABLE 2. FUEL CONSUMPTION 1950-1980 FOR THE STATE OF PENNSYLVANIA

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL(1000 TONS) | | | | | | | | |
| ELECTRIC UTILITIES | 13026. | 15427. | 15435. | 21024. | 28381. | 35778. | 31630. | 41402. |
| INDUSTRIAL BOILERS | 9231. | 8628. | 10440. | 5366. | 7279. | 4598. | 4150. | 4280. |
| COMMERCIAL-RESIDENTIAL | 3593. | 2260. | 1243. | 790. | 822. | 218. | 192. | 1521. |
| ANTHRACITE COAL (1000 TONS) | | | | | | | | |
| ALL USES | 12549. | 9712. | 8964. | 7527. | 6202. | 4339. | 4579. | 2951. |
| RESIDUAL OIL (1000 BBL) | | | | | | | | |
| ELECTRIC UTILITIES | 3590. | 2735. | 3361. | 4008. | 22535. | 11745. | 25797. | 16854. |
| INDUSTRIAL | 29194. | 29992. | 24122. | 22239. | 18579. | 14402. | 20210. | 11421. |
| COMMERCIAL | 702. | 648. | 9939. | 11074. | 14958. | 12675. | 11048. | 1731. |
| DISTILLATE OIL (1000 BBL) | | | | | | | | |
| ELECTRIC UTILITIES | 396. | 101. | 88. | 88. | 4054. | 3257. | 3370. | 2279. |
| INDUSTRIAL | 5573. | 7205. | 4361. | 4521. | 3251. | 4940. | 5986. | 6824. |
| COMMERCIAL-RESIDENTIAL | 4491. | 4271. | 36100. | 41688. | 46492. | 41740. | 42665. | 36259. |
| NATURAL GAS (10E6 CU. FT.) | | | | | | | | |
| ELECTRIC UTILITIES | 1574. | 3260. | 5987. | 858. | 9337. | 1213. | 439. | 2865. |
| INDUSTRIAL | 127022. | 175260. | 218826. | 309242. | 337773. | 261447. | 249953. | 335256. |
| PIPELINES | 3364. | 8956. | 15109. | 19344. | 28917. | 19457. | 26395. | 30806. |
| COMMERCIAL-RESIDENTIAL | 132813. | 206064. | 288180. | 323154. | 396361. | 371625. | 396783. | 406788. |
| WOOD (1000 TONS) | | | | | | | | |
| ELECTRIC UTILITIES | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| INDUSTRIAL | 902. | 1069. | 1152. | 1499. | 1879. | 2110. | 2617. | 2914. |
| COMMERCIAL | 47. | 36. | 29. | 23. | 23. | 23. | 41. | 59. |
| RESIDENTIAL | 2439. | 1880. | 1520. | 1232. | 1191. | 1208. | 2148. | 3096. |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE (1000 GAL.) | 2113360. | 2753293. | 3238763. | 3671220. | NA | NA | NA | NA |
| DIESEL (1000 GAL.) | 25536. | 28896. | 90888. | 168252. | 336882. | 554064. | 629118. | 695310. |
| RURAL VMT (10E6 MILES) | NA | NA | NA | NA | 27714. | 30403. | 34250. | 33570. |
| URBAN VMT (10E6 MILES) | NA | NA | NA | NA | 28963. | 33299. | 40588. | 37954. |
| OTHER | | | | | | | | |
| RAILROADS-COAL(1000 TONS) | 2945. | 597. | 72. | 0. | 0. | 0. | 0. | 0. |
| -OIL(1000 BBL) | 4043. | 5923. | 5026. | 4628. | 3677. | 3096. | 4087. | 4360. |
| COKE PLANTS (1000 TONS COAL) | 23642. | 30637. | 21511. | 28398. | 26527. | 22796. | 18536. | 17252. |
| VESSELS-DISTILLATE(1000 BBL) | 95. | 172. | 103. | 51. | 62. | 82. | 95. | 93. |
| -RESIDUAL(1000 BBL) | 826. | 1789. | 1123. | 893. | 1004. | 900. | 1010. | 1148. |
| OFF HIGHWAY DIESEL (1000 BBL) | 325. | 466. | 469. | 1388. | 936. | 2252. | 3531. | 2564. |
| CEMENT PLANT (1000 TONS) | 7265. | 8810. | 6988. | 7396. | 7831. | 5881. | 6768. | 5471. |

TABLE 1. FUEL CONSUMPTION 1900-1945 FOR THE STATE OF RHODE ISLAND

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL(1000 TONS) | | | | | | | | | | |
| ELECTRIC UTILITIES | 66. | 109. | 149. | 199. | 231. | 251. | 218. | 138. | 187. | 227. |
| INDUSTRIAL BOILERS | 580. | 733. | 830. | 891. | 866. | 863. | 691. | 532. | 563. | 606. |
| COMMERCIAL-RESIDENTIAL | 101. | 133. | 158. | 189. | 190. | 217. | 241. | 205. | 224. | 329. |
| ANTHRACITE COAL (1000 TONS) | | | | | | | | | | |
| ALL USES | 1284. | 1740. | 1876. | 1967. | 1984. | 1482. | 516. | 390. | 648. | 695. |
| RESIDUAL OIL (1000 BBL) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | 2446. | 1944. | 1719. | 1948. | 1200. |
| INDUSTRIAL | NA | NA | NA | NA | NA | 3159. | 3019. | 2989. | 2995. | 1894. |
| COMMERCIAL | NA | NA | NA | NA | NA | 11. | 19. | 30. | 165. | 248. |
| DISTILLATE OIL (1000 BBL) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | 17. | 14. | 12. | 36. | 23. |
| INDUSTRIAL | NA | NA | NA | NA | NA | 42. | 40. | 40. | 51. | 362. |
| COMMERCIAL -RESIDENTIAL | NA | NA | NA | NA | NA | 747. | 1269. | 2037. | 2552. | 2149. |
| NATURAL GAS (10E6 CU. FT.) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | 0. | 0. | 0. | 0. | 0. | 0. |
| INDUSTRIAL | NA | NA | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| WOOD (1000 TONS) | | | | | | | | | | |
| ALL USES | 302. | 287. | 275. | 262. | 250. | 238. | 226. | 217. | 211. | 196. |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE(1000 GAL) | NA | NA | NA | NA | NA | 41627. | 86872. | 106703. | 132074. | 99439. |
| DIESEL (1000 GAL.) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL(1000 TONS) | 277. | 364. | 409. | 403. | 421. | 349. | 300. | 235. | 263. | 390. |
| RAILROADS-OIL(1000 BBL) | NA | NA | NA | NA | NA | 27. | 26. | 21. | 15. | 21. |
| COKE PL (1000 TONS COAL) | 43. | 48. | 57. | 49. | 68. | 81. | 96. | 79. | 143. | 185. |
| VES FUEL OIL (1000 BBL) | NA | NA | NA | NA | NA | 249. | 295. | 234. | 226. | 30. |
| CEMENT PL (1000 TONS) | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |

TABLE 2. FUEL CONSUMPTION 1950-1980 FOR THE STATE OF RHODE ISLAND

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL(1000 TONS) | | | | | | | | |
| ELECTRIC UTILITIES | 247. | 551. | 574. | 403. | 0. | 0. | 1. | 0. |
| INDUSTRIAL BOILERS | 0. | 413. | 614. | 19. | 5. | 1. | 2. | 4. |
| COMMERCIAL-RESIDENTIAL | 141. | 89. | 95. | 3. | 0. | 0. | 0. | 3. |
| ANTHRACITE COAL (1000 TONS) | | | | | | | | |
| ALL USES | 242. | 106. | 14. | 6. | 2. | 2. | 0. | 4. |
| RESIDUAL OIL (1000 BBL) | | | | | | | | |
| ELECTRIC UTILITIES | 2860. | 1534. | 579. | 978. | 3017. | 1672. | 1304. | 1337. |
| INDUSTRIAL | 4208. | 4102. | 2636. | 1489. | 1795. | 942. | 903. | 630. |
| COMMERCIAL | 971. | 2917. | 2524. | 1071. | 4600. | 1797. | 1858. | 180. |
| DISTILLATE OIL (1000 BBL) | | | | | | | | |
| ELECTRIC UTILITIES | 259. | 18. | 34. | 44. | 54. | 5. | 0. | 30. |
| INDUSTRIAL | 89. | 161. | 303. | 160. | 215. | 204. | 171. | 290. |
| COMMERCIAL-RESIDENTIAL | 3252. | 2790. | 7802. | 6969. | 7968. | 7014. | 6904. | 3951. |
| NATURAL GAS (10E6 CU. FT.) | | | | | | | | |
| ELECTRIC UTILITIES | 0. | 111. | 344. | 209. | 2319. | 1437. | 0. | 1679. |
| INDUSTRIAL | 0. | 654. | 2736. | 4983. | 5743. | 5830. | 4638. | 5087. |
| PIPELINES | 0. | 83. | 222. | 98. | 27. | 22. | 12. | 153. |
| COMMERCIAL-RESIDENTIAL | 0. | 4638. | 8405. | 11533. | 17004. | 17276. | 18392. | 86214. |
| WOOD (1000 TONS) | | | | | | | | |
| ELECTRIC UTILITIES | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| INDUSTRIAL | 81. | 97. | 104. | 152. | 235. | 158. | 273. | 293. |
| COMMERCIAL | 2. | 1. | 1. | 1. | 1. | 1. | 2. | 3. |
| RESIDENTIAL | 98. | 75. | 61. | 53. | 68. | 74. | 105. | 134. |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE (1000 GAL.) | 159218. | 226932. | 247752. | 282203. | NA | NA | NA | NA |
| DIESEL (1000 GAL.) | 1386. | 2520. | 6468. | 6426. | 25956. | 19908. | 21294. | 26796. |
| RURAL VMT (10E6 MILES) | NA | NA | NA | NA | 756. | 1003. | 1329. | 1187. |
| URBAN VMT (10E6 MILES) | NA | NA | NA | NA | 3846. | 4657. | 4720. | 4237. |
| OTHER | | | | | | | | |
| RAILROADS-COAL(1000 TONS) | 168. | 34. | 4. | 0. | 0. | 0. | 0. | 0. |
| -OIL(1000 BBL) | 56. | 63. | 68. | 57. | 62. | 68. | 20. | 0. |
| COKE PLANTS (1000 TONS COAL) | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| VESSELS-DISTILLATE(1000 BBL) | 8. | 3. | 8. | 6. | 13. | 10. | 10. | 8. |
| -RESIDUAL(1000 BBL) | 45. | 19. | 11. | 5. | 49. | NA | 5. | 15. |
| OFF HIGHWAY DIESEL (1000 BBL) | 18. | 37. | 12. | 72. | 159. | 69. | 59. | 37. |
| CEMENT PLANT (1000 TONS) | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |

TABLE 1. FUEL CONSUMPTION 1900-1945 FOR THE STATE OF SOUTH CAROLINA

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL(1000 TONS) | | | | | | | | | | |
| ELECTRIC UTILITIES | 49. | 82. | 112. | 149. | 212. | 323. | 335. | 228. | 339. | 462. |
| INDUSTRIAL BOILERS | 112. | 190. | 283. | 394. | 570. | 824. | 960. | 1033. | 1435. | 1956. |
| COMMERCIAL-RESIDENTIAL | 145. | 256. | 397. | 608. | 673. | 767. | 831. | 677. | 712. | 1002. |
| ANTHRACITE COAL (1000 TONS) | | | | | | | | | | |
| ALL USES | 40. | 55. | 59. | 62. | 63. | 47. | NA | NA | NA | NA |
| RESIDUAL OIL (1000 BBL) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | 54. | 43. | 38. | 40. | 58. |
| INDUSTRIAL | NA | NA | NA | NA | NA | 282. | 270. | 267. | 506. | 638. |
| COMMERCIAL | NA | NA | NA | NA | NA | 3. | 6. | 9. | 98. | 67. |
| DISTILLATE OIL (1000 BBL) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | 28. | 23. | 20. | 42. | 72. |
| INDUSTRIAL | NA | NA | NA | NA | NA | 21. | 20. | 20. | 36. | 68. |
| COMMERCIAL -RESIDENTIAL | NA | NA | NA | NA | NA | 31. | 52. | 84. | 310. | 517. |
| NATURAL GAS (10E6 CU. FT.) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | 0. | 0. | 0. | 0. | 0. | 0. |
| INDUSTRIAL | NA | NA | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| WOOD (1000 TONS) | | | | | | | | | | |
| ALL USES | 5330. | 5064. | 4850. | 4637. | 4424. | 4211. | 3998. | 3838. | 3731. | 3465. |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE(1000 GAL) | NA | NA | NA | NA | NA | 79863. | 113413. | 137204. | 220359. | 211767. |
| DIESEL (1000 GAL.) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL(1000 TONS) | 370. | 654. | 967. | 1245. | 1502. | 1318. | 1196. | 985. | 1136. | 1718. |
| RAILROADS-OIL(1000 BBL) | NA | NA | NA | NA | NA | 6. | 6. | 5. | 14. | 272. |
| COKE PL (1000 TONS COAL) | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| VES FUEL OIL (1000 BBL) | NA | NA | NA | NA | NA | 104. | 124. | 98. | 146. | 52. |
| CEMENT PL (1000 TONS) | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |

TABLE 2. FUEL CONSUMPTION 1950-1980 FOR THE STATE OF SOUTH CAROLINA

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL(1000 TONS) | | | | | | | | |
| ELECTRIC UTILITIES | 543. | 996. | 1596. | 2690. | 4153. | 4497. | 6267. | 7411. |
| INDUSTRIAL BOILERS | 1217. | 1138. | 1689. | 1415. | 1700. | 994. | 1381. | 1827. |
| COMMERCIAL-RESIDENTIAL | 796. | 501. | 334. | 229. | 290. | 160. | 11. | 198. |
| ANTHRACITE COAL (1000 TONS) | | | | | | | | |
| ALL USES | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 16. |
| RESIDUAL OIL (1000 BBL) | | | | | | | | |
| ELECTRIC UTILITIES | 631. | 108. | 25. | 32. | 2041. | 4293. | 5244. | 1991. |
| INDUSTRIAL | 2344. | 3009. | 2551. | 1769. | 1270. | 2358. | 7285. | 4254. |
| COMMERCIAL | 264. | 422. | 597. | 340. | 460. | 218. | 413. | 65. |
| DISTILLATE OIL (1000 BBL) | | | | | | | | |
| ELECTRIC UTILITIES | 114. | 0. | 0. | 0. | 808. | 75. | 1001. | 667. |
| INDUSTRIAL | 182. | 294. | 253. | 268. | 592. | 910. | 1043. | 716. |
| COMMERCIAL-RESIDENTIAL | 2284. | 4024. | 6828. | 5077. | 6858. | 3719. | 4381. | 3404. |
| NATURAL GAS (10E6 CU. FT.) | | | | | | | | |
| ELECTRIC UTILITIES | 0. | 15487. | 23278. | 20656. | 45081. | 14566. | 5184. | 5417. |
| INDUSTRIAL | 0. | 19318. | 24561. | 47959. | 78698. | 70329. | 53611. | 92046. |
| PIPELINES | 0. | 1066. | 1221. | 2301. | 3271. | 2641. | 3883. | 3014. |
| COMMERCIAL-RESIDENTIAL | 0. | 2659. | 11508. | 18978. | 32780. | 35413. | 52895. | 101972. |
| WOOD (1000 TONS) | | | | | | | | |
| ELECTRIC UTILITIES | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| INDUSTRIAL | 785. | 931. | 1003. | 1350. | 1804. | 1852. | 2331. | 2282. |
| COMMERCIAL | 45. | 35. | 28. | 19. | 11. | 11. | 11. | 12. |
| RESIDENTIAL | 2368. | 1826. | 1476. | 991. | 569. | 572. | 602. | 620. |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE (1000 GAL.) | 425392. | 599597. | 725983. | 918673. | NA | NA | NA | NA |
| DIESEL (1000 GAL.) | 5586. | 7056. | 13440. | 38556. | 93072. | 134862. | 176568. | 225624. |
| RURAL VMT (10E6 MILES) | NA | NA | NA | NA | 10814. | 13551. | 17021. | 15928. |
| URBAN VMT (10E6 MILES) | NA | NA | NA | NA | 5745. | 7052. | 7233. | 6791. |
| OTHER | | | | | | | | |
| RAILROADS-COAL(1000 TONS) | 944. | 293. | 60. | 0. | 0. | 0. | 0. | 0. |
| -OIL(1000 BBL) | 486. | 589. | 456. | 459. | 449. | 332. | 461. | 468. |
| COKE PLANTS (1000 TONS COAL) | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| VESSELS-DISTILLATE(1000 BBL) | 12. | 20. | 36. | 14. | 19. | 26. | 37. | 42. |
| -RESIDUAL(1000 BBL) | 90. | 115. | 191. | 95. | 347. | 90. | 149. | 203. |
| OFF HIGHWAY DIESEL (1000 BBL) | 213. | 262. | 498. | 343. | 515. | 499. | 439. | 265. |
| CEMENT PLANT (1000 TONS) | 168. | 327. | 458. | 566. | 1899. | 1969. | 1959. | 1780. |

TABLE 1. FUEL CONSUMPTION 1900-1945 FOR THE STATE OF SOUTH DAKOTA

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL(1000 TONS) | | | | | | | | | | |
| ELECTRIC UTILITIES | 52. | 86. | 117. | 156. | 166. | 148. | 130. | 102. | 175. | 275. |
| INDUSTRIAL BOILERS | 131. | 180. | 223. | 266. | 235. | 167. | 142. | 151. | 209. | 284. |
| COMMERCIAL-RESIDENTIAL | 307. | 441. | 576. | 761. | 799. | 912. | 959. | 742. | 738. | 979. |
| ANTHRACITE COAL (1000 TONS) | | | | | | | | | | |
| ALL USES | 118. | 159. | 172. | 180. | 182. | 136. | NA | NA | NA | NA |
| RESIDUAL OIL (1000 BBL) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | 114. | 90. | 80. | 85. | 45. |
| INDUSTRIAL | NA | NA | NA | NA | NA | 5. | 5. | 5. | NA | 30. |
| COMMERCIAL | NA | NA | NA | NA | NA | 7. | 11. | 18. | 21. | 1. |
| DISTILLATE OIL (1000 BBL) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | 54. | 43. | 38. | 42. | 112. |
| INDUSTRIAL | NA | NA | NA | NA | NA | 4. | 4. | 4. | 1. | 7. |
| COMMERCIAL -RESIDENTIAL | NA | NA | NA | NA | NA | 30. | 50. | 81. | 255. | 184. |
| NATURAL GAS (10E6 CU. FT.) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | NA | NA | 827. | 1210. | 2141. |
| INDUSTRIAL | NA | NA | 20. | NA | 6. | NA | 1733. | 1765. | 2722. | NA |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | 23. | 26. | 14. | 4. | 1172. | 1353. | 2522. | NA |
| WOOD (1000 TONS) | | | | | | | | | | |
| ALL USES | 215. | 204. | 196. | 187. | 178. | 170. | 161. | 155. | 151. | 140. |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE(1000 GAL) | NA | NA | NA | NA | NA | 64187. | 88053. | 102027. | 114953. | 102763. |
| DIESEL (1000 GAL.) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL(1000 TONS) | 549. | 783. | 964. | 1057. | 1138. | 916. | 763. | 578. | 607. | 828. |
| RAILROADS-OIL(1000 BBL) | NA | NA | NA | NA | NA | 70. | 66. | 54. | 112. | 197. |
| COKE PL (1000 TONS COAL) | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| VES FUEL OIL (1000 BBL) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CEMENT PL (1000 TONS) | 7. | NA | 0. | 0. | 0. | NA | NA | NA | NA | NA |

TABLE 2. FUEL CONSUMPTION 1950-1980 FOR THE STATE OF SOUTH DAKOTA

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL(1000 TONS) | | | | | | | | |
| ELECTRIC UTILITIES | 274. | 263. | 246. | 237. | 1216. | 2134. | 3133. | 2795. |
| INDUSTRIAL BOILERS | 98. | 92. | 113. | 271. | 46. | 50. | 178. | 127. |
| COMMERCIAL-RESIDENTIAL | 216. | 136. | 136. | 106. | 28. | 16. | 1. | 17. |
| ANTHRACITE COAL (1000 TONS) | | | | | | | | |
| ALL USES | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| RESIDUAL OIL (1000 BBL) | | | | | | | | |
| ELECTRIC UTILITIES | 19. | 10. | 0. | 25. | 291. | 78. | 70. | 4. |
| INDUSTRIAL | 116. | 55. | 15. | 2. | 31. | 66. | 72. | 84. |
| COMMERCIAL | 32. | 19. | 31. | 20. | 15. | 8. | 60. | 19. |
| DISTILLATE OIL (1000 BBL) | | | | | | | | |
| ELECTRIC UTILITIES | 229. | 124. | 42. | 20. | 48. | 139. | 129. | 103. |
| INDUSTRIAL | 57. | 334. | 25. | 73. | 151. | 72. | 76. | 97. |
| COMMERCIAL-RESIDENTIAL | 672. | 846. | 2996. | 3061. | 2755. | 2090. | 1267. | 1174. |
| NATURAL GAS (10E6 CU. FT.) | | | | | | | | |
| ELECTRIC UTILITIES | 1706. | 3548. | 4454. | 2133. | 4364. | 3232. | 24. | 259. |
| INDUSTRIAL | 2185. | 5055. | 5503. | 5638. | 6800. | 5813. | 6946. | 4678. |
| PIPELINES | 9. | 37. | 46. | 30. | 10. | 32. | 32. | 76. |
| COMMERCIAL-RESIDENTIAL | 5074. | 8622. | 14879. | 18896. | 25145. | 23457. | 28421. | 41565. |
| WOOD (1000 TONS) | | | | | | | | |
| ELECTRIC UTILITIES | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| INDUSTRIAL | 13. | 16. | 17. | 15. | 28. | 44. | 65. | 49. |
| COMMERCIAL | 2. | 1. | 1. | 1. | 1. | 1. | 1. | 1. |
| RESIDENTIAL | 114. | 88. | 71. | 49. | 38. | 41. | 52. | 59. |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE (1000 GAL.) | 191393. | 208483. | 252220. | 291398. | NA | NA | NA | NA |
| DIESEL (1000 GAL.) | 4032. | 6762. | 4494. | 14196. | 44688. | 41748. | 59892. | 71736. |
| RURAL VMT (10E6 MILES) | NA | NA | NA | NA | 3757. | 4049. | 4675. | 4980. |
| URBAN VMT (10E6 MILES) | NA | NA | NA | NA | 932. | 1011. | 1155. | 1215. |
| OTHER | | | | | | | | |
| RAILROADS-COAL(1000 TONS) | 451. | 146. | 31. | 15. | 7. | 0. | 0. | 0. |
| -OIL(1000 BBL) | 297. | 534. | 222. | 304. | 219. | 259. | 238. | 217. |
| COKE PLANTS (1000 TONS COAL) | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| VESSELS-DISTILLATE(1000 BBL) | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| -RESIDUAL(1000 BBL) | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| OFF HIGHWAY DIESEL (1000 BBL) | 71. | 168. | 425. | 568. | 352. | 235. | 534. | 129. |
| CEMENT PLANT (1000 TONS) | 244. | 309. | 351. | 364. | 564. | 503. | 515. | 464. |

TABLE 1. FUEL CONSUMPTION 1900-1945 FOR THE STATE OF TENNESSEE

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL(1000 TONS) | | | | | | | | | | |
| ELECTRIC UTILITIES | 112. | 186. | 254. | 339. | 394. | 433. | 634. | 727. | 1582. | 2930. |
| INDUSTRIAL BOILERS | 950. | 1258. | 1505. | 1722. | 1934. | 2299. | 2361. | 2360. | 3130. | 4127. |
| COMMERCIAL-RESIDENTIAL | 743. | 1027. | 1294. | 1643. | 1698. | 1936. | 2199. | 1931. | 2176. | 3265. |
| ANTHRACITE COAL (1000 TONS) | | | | | | | | | | |
| ALL USES | 6. | 8. | 9. | 9. | 9. | 7. | NA | NA | NA | NA |
| RESIDUAL OIL (1000 BBL) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | 36. | 28. | 25. | 108. | 108. |
| INDUSTRIAL | NA | NA | NA | NA | NA | 124. | 118. | 117. | 69. | 233. |
| COMMERCIAL | NA | NA | NA | NA | NA | 10. | 17. | 28. | 25. | 246. |
| DISTILLATE OIL (1000 BBL) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | 41. | 33. | 29. | 8. | 34. |
| INDUSTRIAL | NA | NA | NA | NA | NA | 90. | 86. | 85. | 78. | 325. |
| COMMERCIAL -RESIDENTIAL | NA | NA | NA | NA | NA | 58. | 98. | 158. | 268. | 800. |
| NATURAL GAS (10E6 CU. FT.) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | 707. | 1478. | 3856. | 3085. | 4511. | 4416. |
| INDUSTRIAL | NA | NA | NA | 400. | 11. | 0. | 1232. | 4061. | 6262. | 14503. |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | 1. | 1. | 4. | 9. | 2246. | 3243. | 6046. | 9916. |
| WOOD (1000 TONS) | | | | | | | | | | |
| ALL USES | 6433. | 6112. | 5854. | 5597. | 5340. | 5082. | 4825. | 4632. | 4503. | 4182. |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE(1000 GAL) | NA | NA | NA | NA | NA | 116137. | 204187. | 297120. | 300562. | 329429. |
| DIESEL (1000 GAL.) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL(1000 TONS) | 1299. | 1788. | 2118. | 2227. | 2486. | 2182. | 1980. | 1631. | 1880. | 2845. |
| RAILROADS-OIL(1000 BBL) | NA | NA | NA | NA | NA | 112. | 105. | 86. | 234. | 608. |
| COKE PL (1000 TONS COAL) | 434. | 509. | 637. | 599. | 592. | 397. | 320. | 211. | 306. | 319. |
| VES FUEL OIL (1000 BBL) | NA | NA | NA | NA | NA | 46. | 54. | 43. | 243. | 610. |
| CEMENT PL (1000 TONS) | 0. | 0. | NA | NA | NA | NA | NA | NA | NA | NA |

TABLE 2. FUEL CONSUMPTION 1950-1980 FOR THE STATE OF TENNESSEE

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL(1000 TONS) | | | | | | | | |
| ELECTRIC UTILITIES | 459. | 5821. | 12138. | 10637. | 15500. | 24659. | 19128. | 23295. |
| INDUSTRIAL BOILERS | 2557. | 2390. | 1632. | 3142. | 2000. | 1589. | 4305. | 2608. |
| COMMERCIAL-RESIDENTIAL | 2726. | 1715. | 947. | 659. | 638. | 215. | 54. | 214. |
| ANTHRACITE COAL (1000 TONS) | | | | | | | | |
| ALL USES | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| RESIDUAL OIL (1000 BBL) | | | | | | | | |
| ELECTRIC UTILITIES | 49. | 3. | 0. | 0. | 0. | 0. | 0. | 0. |
| INDUSTRIAL | 243. | 237. | 141. | 203. | 572. | 330. | 1528. | 1376. |
| COMMERCIAL | 302. | 106. | 24. | 5. | 15. | 433. | 1001. | 48. |
| DISTILLATE OIL (1000 BBL) | | | | | | | | |
| ELECTRIC UTILITIES | 9. | 2. | 0. | 2. | 0. | 1882. | 5152. | 397. |
| INDUSTRIAL | 410. | 338. | 522. | 534. | 722. | 1599. | 2700. | 2275. |
| COMMERCIAL-RESIDENTIAL | 1835. | 2382. | 2033. | 2444. | 5189. | 4676. | 5385. | 2003. |
| NATURAL GAS (10E6 CU. FT.) | | | | | | | | |
| ELECTRIC UTILITIES | 5928. | 2184. | 7225. | 18268. | 17253. | 0. | 0. | 1105. |
| INDUSTRIAL | 43920. | 71460. | 89244. | 101719. | 121880. | 111281. | 98393. | 123122. |
| PIPELINES | 6557. | 7648. | 5341. | 22693. | 26459. | 19152. | 14415. | 16492. |
| COMMERCIAL-RESIDENTIAL | 17336. | 38944. | 58122. | 65449. | 89291. | 86508. | 70724. | 173820. |
| WOOD (1000 TONS) | | | | | | | | |
| ELECTRIC UTILITIES | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| INDUSTRIAL | 888. | 1053. | 1134. | 1581. | 2171. | 2170. | 2680. | 2861. |
| COMMERCIAL | 45. | 35. | 28. | 21. | 18. | 19. | 28. | 38. |
| RESIDENTIAL | 2927. | 1824. | 1475. | 1104. | 937. | 977. | 1480. | 1987. |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE (1000 GAL.) | 637698. | 892513. | 1124925. | 1416225. | NA | NA | NA | NA |
| DIESEL (1000 GAL.) | 8946. | 9912. | 27006. | 58548. | 178164. | 245784. | 379512. | 381360. |
| RURAL VMT (10E6 MILES) | NA | NA | NA | NA | 11547. | 16704. | 21267. | 17248. |
| URBAN VMT (10E6 MILES) | NA | NA | NA | NA | 9172. | 16222. | 16816. | 16257. |
| OTHER | | | | | | | | |
| RAILROADS-COAL(1000 TONS) | 1563. | 486. | 99. | 0. | 0. | 0. | 0. | 0. |
| -OIL(1000 BBL) | 1425. | 1761. | 1874. | 2117. | 2150. | 2228. | 3241. | 3045. |
| COKE PLANTS (1000 TONS COAL) | 332. | 259. | 199. | 185. | 177. | 170. | 205. | 120. |
| VESSELS-DISTILLATE(1000 BBL) | 29. | 20. | 72. | 215. | 287. | 459. | 378. | 246. |
| -RESIDUAL(1000 BBL) | 118. | 101. | 0. | 1. | 0. | 0. | 0. | 0. |
| OFF HIGHWAY DIESEL (1000 BBL) | 277. | 391. | 1020. | 1321. | 1047. | 1612. | 1816. | 601. |
| CEMENT PLANT (1000 TONS) | 1257. | 1525. | 1490. | 1660. | 1604. | 1198. | 1518. | 1328. |

TABLE 1. FUEL CONSUMPTION 1900-1945 FOR THE STATE OF TEXAS

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL(1000 TONS) | | | | | | | | | | |
| ELECTRIC UTILITIES | 116. | 191. | 262. | 349. | 466. | 651. | 613. | 362. | 448. | 468. |
| INDUSTRIAL BOILERS | 769. | 975. | 1110. | 1199. | 1037. | 797. | 584. | 485. | 554. | 645. |
| COMMERCIAL-RESIDENTIAL | 473. | 627. | 752. | 904. | 911. | 1039. | 1047. | 746. | 671. | 785. |
| ANTHRACITE COAL (1000 TONS) | | | | | | | | | | |
| ALL USES | 14. | 19. | 21. | 22. | 22. | 17. | NA | NA | NA | NA |
| RESIDUAL OIL (1000 BBL) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | 481. | 382. | 338. | 219. | 375. |
| INDUSTRIAL | NA | NA | NA | NA | NA | 9917. | 9478. | 9384. | 10163. | 9780. |
| COMMERCIAL | NA | NA | NA | NA | NA | 254. | 431. | 692. | 2108. | 23971. |
| DISTILLATE OIL (1000 BBL) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | 34. | 27. | 24. | 25. | 4. |
| INDUSTRIAL | NA | NA | NA | NA | NA | 131. | 125. | 124. | 115. | 701. |
| COMMERCIAL -RESIDENTIAL | NA | NA | NA | NA | NA | 138. | 235. | 377. | 681. | 15647. |
| NATURAL GAS (10E6 CU. FT.) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | 8046. | 16823. | 43885. | 35089. | 51316. | 104147. |
| INDUSTRIAL | NA | NA | NA | 8397. | 39573. | 127306. | 441217. | 498193. | 768142. | 1271275. |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | NA | 4927. | 9894. | 15179. | 41058. | 29415. | 54836. | 76865. |
| WOOD (1000 TONS) | | | | | | | | | | |
| ALL USES | 4052. | 3849. | 3687. | 3525. | 3363. | 3201. | 3039. | 2917. | 2836. | 2634. |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE(1000 GAL) | NA | NA | NA | NA | NA | 441840. | 749111. | 850753. | 1204397. | 1173339. |
| DIESEL (1000 GAL.) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL(1000 TONS) | 2275. | 3001. | 3382. | 3351. | 3452. | 2777. | 2313. | 1752. | 1838. | 2505. |
| RAILROADS-OIL(1000 BBL) | NA | NA | NA | NA | NA | 20875. | 19627. | 16086. | 15139. | 31101. |
| COKE PL (1000 TONS COAL) | 0. | 0. | 0. | 0. | 0. | 0. | 53. | 103. | 268. | 435. |
| VES FUEL OIL (1000 BBL) | NA | NA | NA | NA | NA | 16060. | 19067. | 15107. | 13720. | 19294. |
| CEMENT PL (1000 TONS) | 5. | NA | NA | 365. | 482. | 913. | 1274. | 712. | 1386. | 1511. |

TABLE 2. FUEL CONSUMPTION 1950-1980 FOR THE STATE OF TEXAS

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL(1000 TONS) | | | | | | | | |
| ELECTRIC UTILITIES | 0. | 0. | 0. | 0. | 0. | 9070. | 26666. | 47647. |
| INDUSTRIAL BOILERS | 0. | 992. | 1211. | 460. | 10. | 2325. | 1706. | 2410. |
| COMMERCIAL-RESIDENTIAL | 152. | 96. | 56. | 20. | 9. | 0. | 0. | 1. |
| ANTHRACITE COAL (1000 TONS) | | | | | | | | |
| ALL USES | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 2. |
| RESIDUAL OIL (1000 BBL) | | | | | | | | |
| ELECTRIC UTILITIES | 42. | 17. | 32. | 8. | 273. | 3227. | 3718. | 853. |
| INDUSTRIAL | 4185. | 5304. | 3915. | 1412. | 1691. | 7063. | 15975. | 15441. |
| COMMERCIAL | 2292. | 3617. | 321. | 54. | 908. | 6005. | 5682. | 0. |
| DISTILLATE OIL (1000 BBL) | | | | | | | | |
| ELECTRIC UTILITIES | 167. | 74. | 36. | 42. | 63. | 1923. | 2347. | 2050. |
| INDUSTRIAL | 3064. | 3266. | 4161. | 3680. | 3756. | 6095. | 12246. | 9733. |
| COMMERCIAL-RESIDENTIAL | 4692. | 8359. | 2668. | 1922. | 12407. | 16334. | 21228. | 12676. |
| NATURAL GAS (10E6 CU. FT.) | | | | | | | | |
| ELECTRIC UTILITIES | 165406. | 273280. | 407310. | 650320. | 1059816. | 1353290. | 1490695. | 1430027. |
| INDUSTRIAL | 1686620. | 2017202. | 2086047. | 2084872. | 1789533. | 1396790. | 1443911. | 1626167. |
| PIPELINES | 18661. | 41714. | 501853. | 648076. | 865729. | 845228. | 833031. | 641592. |
| COMMERCIAL-RESIDENTIAL | 119272. | 177624. | 231398. | 263202. | 378279. | 349069. | 443795. | 805412. |
| WOOD (1000 TONS) | | | | | | | | |
| ELECTRIC UTILITIES | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| INDUSTRIAL | 1089. | 1291. | 1391. | 1787. | 2595. | 2743. | 3857. | 3854. |
| COMMERCIAL | 26. | 20. | 16. | 10. | 7. | 8. | 10. | 11. |
| RESIDENTIAL | 1316. | 1014. | 820. | 545. | 374. | 440. | 509. | 558. |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE (1000 GAL.) | 2356756. | 3160619. | 3728618. | 4676616. | NA | NA | NA | NA |
| DIESEL (1000 GAL.) | 78582. | 82446. | 123648. | 215754. | 458850. | 718830. | 1059618. | 1183140. |
| RURAL VMT (10E6 MILES) | NA | NA | NA | NA | 31368. | 37011. | 45080. | 44301. |
| URBAN VMT (10E6 MILES) | NA | NA | NA | NA | 36663. | 45571. | 64271. | 66080. |
| OTHER | | | | | | | | |
| RAILROADS-COAL(1000 TONS) | 1365. | 443. | 93. | 46. | 21. | 0. | 0. | 0. |
| -OIL(1000 BBL) | 19577. | 7761. | 7910. | 6660. | 7428. | 12012. | 11084. | 7831. |
| COKE PLANTS (1000 TONS COAL) | 961. | 1042. | 0. | 922. | 1125. | 975. | 374. | 840. |
| VESSELS-DISTILLATE(1000 BBL) | 535. | 690. | 532. | 256. | 586. | 1038. | 1506. | 1440. |
| -RESIDUAL(1000 BBL) | 5980. | 6430. | 3975. | 2787. | 2817. | 5874. | 9387. | 11220. |
| OFF HIGHWAY DIESEL (1000 BBL) | 918. | 1218. | 4003. | 4211. | 3083. | 4342. | 6206. | 4394. |
| CEMENT PLANT (1000 TONS) | 3224. | 4557. | 4360. | 5785. | 6502. | 7074. | 8624. | 9151. |

TABLE 1. FUEL CONSUMPTION 1900-1945 FOR THE STATE OF UTAH

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL(1000 TONS) | | | | | | | | | | |
| ELECTRIC UTILITIES | 3. | 4. | 6. | 8. | 10. | 14. | 23. | 27. | 58. | 108. |
| INDUSTRIAL BOILERS | 218. | 325. | 437. | 560. | 651. | 761. | 685. | 579. | 674. | 798. |
| COMMERCIAL-RESIDENTIAL | 341. | 530. | 748. | 1060. | 1142. | 1303. | 1357. | 1033. | 1008. | 1309. |
| ANTHRACITE COAL (1000 TONS) | | | | | | | | | | |
| ALL USES | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| RESIDUAL OIL (1000 BBL) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | 6. | 5. | 4. | 4. | NA |
| INDUSTRIAL | NA | NA | NA | NA | NA | 138. | 132. | 131. | 133. | 192. |
| COMMERCIAL | NA | NA | NA | NA | NA | 2. | 4. | 6. | 14. | 5. |
| DISTILLATE OIL (1000 BBL) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | 6. | 5. | 4. | 22. | 30. |
| INDUSTRIAL | NA | NA | NA | NA | NA | 7. | 7. | 7. | 10. | 29. |
| COMMERCIAL -RESIDENTIAL | NA | NA | NA | NA | NA | 28. | 47. | 75. | 76. | 339. |
| NATURAL GAS (10E6 CU. FT.) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | NA | NA | NA | NA | 35. |
| INDUSTRIAL | NA | NA | 0. | 0. | 0. | 0. | 2978. | 8332. | 12847. | 20898. |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | 0. | 0. | 0. | 0. | 1067. | 1993. | 3716. | 9164. |
| WOOD (1000 TONS) | | | | | | | | | | |
| ALL USES | 318. | 302. | 290. | 277. | 264. | 251. | 239. | 229. | 223. | 207. |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE(1000 GAL) | NA | NA | NA | NA | NA | 30218. | 57523. | 67012. | 101218. | 102407. |
| DIESEL (1000 GAL.) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL(1000 TONS) | 337. | 521. | 695. | 822. | 912. | 733. | 611. | 463. | 486. | 662. |
| RAILROADS-OIL(1000 BBL) | NA | NA | NA | NA | NA | 334. | 314. | 257. | 285. | 591. |
| COKE PL (1000 TONS COAL) | 245. | 322. | 458. | 497. | 571. | 469. | 558. | 538. | 1086. | 1527. |
| VES FUEL OIL (1000 BBL) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CEMENT PL (1000 TONS) | 13. | NA | 153. | 118. | 206. | NA | NA | NA | NA | NA |

TABLE 2. FUEL CONSUMPTION 1950-1980 FOR THE STATE OF UTAH

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL(1000 TONS) | | | | | | | | |
| ELECTRIC UTILITIES | 136. | 376. | 515. | 363. | 463. | 1996. | 2896. | 5224. |
| INDUSTRIAL BOILERS | 1649. | 1542. | 379. | 163. | 481. | 460. | 795. | 427. |
| COMMERCIAL-RESIDENTIAL | 653. | 411. | 249. | 181. | 129. | 87. | 71. | 237. |
| ANTHRACITE COAL (1000 TONS) | | | | | | | | |
| ALL USES | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| RESIDUAL OIL (1000 BBL) | | | | | | | | |
| ELECTRIC UTILITIES | 4. | 957. | 2209. | 1584. | 1775. | 120. | 73. | 12. |
| INDUSTRIAL | 2883. | 2726. | 2520. | 3219. | 2135. | 3595. | 3197. | 2353. |
| COMMERCIAL | 8. | 56. | 454. | 597. | 689. | 946. | 1072. | 1053. |
| DISTILLATE OIL (1000 BBL) | | | | | | | | |
| ELECTRIC UTILITIES | 75. | 123. | 93. | 23. | 9. | 25. | 85. | 77. |
| INDUSTRIAL | 105. | 191. | 218. | 249. | 450. | 1684. | 2000. | 938. |
| COMMERCIAL-RESIDENTIAL | 290. | 785. | 867. | 1229. | 1331. | 2516. | 2011. | 1181. |
| NATURAL GAS (10E6 CU. FT.) | | | | | | | | |
| ELECTRIC UTILITIES | 1408. | 9758. | 3677. | 4103. | 3513. | 2725. | 7575. | 5133. |
| INDUSTRIAL | 15553. | 29406. | 39176. | 71031. | 62484. | 48104. | 45422. | 43545. |
| PIPELINES | 0. | 0. | 89. | 402. | 1123. | 7540. | 9303. | 8445. |
| COMMERCIAL-RESIDENTIAL | 11163. | 19497. | 32735. | 46188. | 54817. | 65791. | 56213. | 158338. |
| WOOD (1000 TONS) | | | | | | | | |
| ELECTRIC UTILITIES | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| INDUSTRIAL | 16. | 19. | 20. | 20. | 31. | 49. | 93. | 85. |
| COMMERCIAL | 3. | 2. | 2. | 2. | 2. | 8. | 10. | 11. |
| RESIDENTIAL | 172. | 132. | 107. | 92. | 101. | 117. | 165. | 228. |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE (1000 GAL.) | 192222. | 243349. | 321079. | 393191. | NA | NA | NA | NA |
| DIESEL (1000 GAL.) | 16422. | 18732. | 20916. | 41748. | 69846. | 72408. | 89544. | 109578. |
| RURAL VMT (10E6 MILES) | NA | NA | NA | NA | 3358. | 3627. | 4791. | 4341. |
| URBAN VMT (10E6 MILES) | NA | NA | NA | NA | 2750. | 4315. | 5035. | 6504. |
| OTHER | | | | | | | | |
| RAILROADS-COAL(1000 TONS) | 361. | 117. | 25. | 12. | 6. | 0. | 0. | 0. |
| -OIL(1000 BBL) | 2744. | 2014. | 1976. | 1654. | 1719. | 2138. | 1973. | 2329. |
| COKE PLANTS (1000 TONS COAL) | 1779. | 2257. | 2280. | 1890. | 1937. | 1971. | 1575. | 1464. |
| VESSELS-DISTILLATE(1000 BBL) | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| -RESIDUAL(1000 BBL) | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| OFF HIGHWAY DIESEL (1000 BBL) | 193. | 235. | 341. | 478. | 627. | 775. | 829. | 707. |
| CEMENT PLANT (1000 TONS) | 214. | 291. | 360. | 371. | 412. | 522. | 618. | 558. |

TABLE 1. FUEL CONSUMPTION 1900-1945 FOR THE STATE OF VERMONT

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL(1000 TONS) | | | | | | | | | | |
| ELECTRIC UTILITIES | 38. | 63. | 86. | 114. | 130. | 137. | 116. | 73. | 98. | 117. |
| INDUSTRIAL BOILERS | 233. | 322. | 404. | 486. | 487. | 468. | 366. | 276. | 287. | 302. |
| COMMERCIAL-RESIDENTIAL | 41. | 59. | 78. | 103. | 109. | 125. | 135. | 111. | 118. | 166. |
| ANTHRACITE COAL (1000 TONS) | | | | | | | | | | |
| ALL USES | 1284. | 1740. | 1876. | 1967. | 1984. | 1482. | 516. | 390. | 648. | 695. |
| RESIDUAL OIL (1000 BBL) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | 11. | 9. | 8. | 8. | 19. |
| INDUSTRIAL | NA | NA | NA | NA | NA | 37. | 35. | 35. | 75. | 56. |
| COMMERCIAL | NA | NA | NA | NA | NA | 0. | 1. | 1. | NA | NA |
| DISTILLATE OIL (1000 BBL) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | 40. | 32. | 28. | 24. | 34. |
| INDUSTRIAL | NA | NA | NA | NA | NA | 31. | 29. | 29. | 34. | 51. |
| COMMERCIAL -RESIDENTIAL | NA | NA | NA | NA | NA | 175. | 297. | 477. | 569. | 447. |
| NATURAL GAS (10E6 CU. FT.) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | 0. | 0. | 0. | 0. | 0. | 0. |
| INDUSTRIAL | NA | NA | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| WOOD (1000 TONS) | | | | | | | | | | |
| ALL USES | 883. | 839. | 804. | 769. | 733. | 698. | 663. | 636. | 618. | 574. |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE(1000 GAL) | NA | NA | NA | NA | NA | 24828. | 45265. | 50344. | 68661. | 51817. |
| DIESEL (1000 GAL.) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL(1000 TONS) | 151. | 217. | 269. | 297. | 327. | 271. | 233. | 183. | 204. | 304. |
| RAILROADS-OIL(1000 BBL) | NA | NA | NA | NA | NA | 4. | 4. | 3. | 2. | 8. |
| COKE PL (1000 TONS COAL) | 17. | 20. | 27. | 26. | 37. | 44. | 51. | 40. | 72. | 92. |
| VES FUEL OIL (1000 BBL) | NA | NA | NA | NA | NA | 2. | 3. | 2. | 1. | NA |
| CEMENT PL (1000 TONS) | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |

TABLE 2. FUEL CONSUMPTION 1950-1980 FOR THE STATE OF VERMONT

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL(1000 TONS) | | | | | | | | |
| ELECTRIC UTILITIES | 2. | 71. | 19. | 40. | 54. | 8. | 0. | 0. |
| INDUSTRIAL BOILERS | 0. | 13. | 20. | 0. | 0. | 0. | 1. | 2. |
| COMMERCIAL-RESIDENTIAL | 4. | 3. | 3. | 5. | 1. | 2. | 0. | 11. |
| ANTHRACITE COAL (1000 TONS) | | | | | | | | |
| ALL USES | 237. | 150. | 29. | 11. | 21. | 6. | 5. | 11. |
| RESIDUAL OIL (1000 BBL) | | | | | | | | |
| ELECTRIC UTILITIES | 63. | 80. | 31. | 64. | 23. | 0. | 0. | 0. |
| INDUSTRIAL | 234. | 194. | 326. | 316. | 481. | 197. | 425. | 235. |
| COMMERCIAL | 1. | 6. | 141. | 545. | 398. | 219. | 648. | 237. |
| DISTILLATE OIL (1000 BBL) | | | | | | | | |
| ELECTRIC UTILITIES | 60. | 46. | 2. | 3. | 262. | 68. | 4. | 17. |
| INDUSTRIAL | 121. | 92. | 67. | 123. | 94. | 81. | 173. | 172. |
| COMMERCIAL-RESIDENTIAL | 825. | 603. | 3370. | 4728. | 5389. | 4071. | 4433. | 3053. |
| NATURAL GAS (10E6 CU. FT.) | | | | | | | | |
| ELECTRIC UTILITIES | 0. | 0. | 0. | 0. | 0. | 732. | 39. | 239. |
| INDUSTRIAL | 0. | 0. | 0. | 0. | 1446. | 2165. | 2370. | 1623. |
| PIPELINES | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| COMMERCIAL-RESIDENTIAL | 0. | 0. | 0. | 0. | 2540. | 2842. | 3106. | 8934. |
| WOOD (1000 TONS) | | | | | | | | |
| ELECTRIC UTILITIES | 0. | 0. | 0. | 0. | 0. | 0. | 11. | 45. |
| INDUSTRIAL | 201. | 239. | 257. | 241. | 252. | 238. | 388. | 389. |
| COMMERCIAL | 6. | 5. | 4. | 3. | 2. | 3. | 5. | 7. |
| RESIDENTIAL | 323. | 249. | 201. | 159. | 122. | 143. | 266. | 368. |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE (1000 GAL.) | 93370. | 114465. | 130122. | 157952. | NA | NA | NA | NA |
| DIESEL (1000 GAL.) | 378. | 546. | 2016. | 4872. | 10248. | 18060. | 25578. | 29358. |
| RURAL VMT (10E6 MILES) | NA | NA | NA | NA | 2160. | 2709. | 3217. | 2981. |
| URBAN VMT (10E6 MILES) | NA | NA | NA | NA | 527. | 605. | 540. | 719. |
| OTHER | | | | | | | | |
| RAILROADS-COAL(1000 TONS) | 131. | 27. | 3. | 0. | 0. | 0. | 0. | 0. |
| -OIL(1000 BBL) | 43. | 118. | 201. | 63. | 66. | 31. | 65. | 47. |
| COKE PLANTS (1000 TONS COAL) | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| VESSELS-DISTILLATE(1000 BBL) | 1. | 1. | 0. | 2. | 2. | 2. | 2. | 2. |
| -RESIDUAL(1000 BBL) | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| OFF HIGHWAY DIESEL (1000 BBL) | 19. | 23. | 54. | 50. | 66. | 60. | 60. | 191. |
| CEMENT PLANT (1000 TONS) | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |

TABLE 1. FUEL CONSUMPTION 1900-1945 FOR THE STATE OF VIRGINIA

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL(1000 TONS) | | | | | | | | | | |
| ELECTRIC UTILITIES | 166. | 276. | 377. | 503. | 620. | 764. | 803. | 630. | 1084. | 1700. |
| INDUSTRIAL BOILERS | 837. | 1265. | 1721. | 2235. | 2356. | 2357. | 2350. | 2445. | 3329. | 4472. |
| COMMERCIAL-RESIDENTIAL | 364. | 575. | 821. | 1174. | 1270. | 1449. | 1865. | 1923. | 2445. | 4037. |
| ANTHRACITE COAL (1000 TONS) | | | | | | | | | | |
| ALL USES | 111. | 150. | 162. | 170. | 172. | 128. | 85. | 64. | 107. | 129. |
| RESIDUAL OIL (1000 BBL) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | 275. | 218. | 193. | 103. | 157. |
| INDUSTRIAL | NA | NA | NA | NA | NA | 265. | 254. | 251. | 383. | 354. |
| COMMERCIAL | NA | NA | NA | NA | NA | 169. | 287. | 460. | 691. | 543. |
| DISTILLATE OIL (1000 BBL) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | 148. | 118. | 104. | 232. | 328. |
| INDUSTRIAL | NA | NA | NA | NA | NA | 82. | 79. | 78. | 83. | 184. |
| COMMERCIAL -RESIDENTIAL | NA | NA | NA | NA | NA | 87. | 148. | 237. | 369. | 829. |
| NATURAL GAS (10E6 CU. FT.) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | 0. | 0. | 0. | NA | NA | NA |
| INDUSTRIAL | NA | NA | 0. | 0. | 0. | 0. | 0. | NA | NA | NA |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | 0. | 0. | 0. | 0. | 0. | NA | NA | NA |
| WOOD (1000 TONS) | | | | | | | | | | |
| ALL USES | 6687. | 6352. | 6085. | 5817. | 5550. | 5282. | 5015. | 4814. | 4681. | 4346. |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE(1000 GAL) | NA | NA | NA | NA | NA | 126687. | 219313. | 273202. | 400159. | 381415. |
| DIESEL (1000 GAL.) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL(1000 TONS) | 1408. | 2214. | 2988. | 3576. | 4205. | 3690. | 3348. | 2758. | 3179. | 4809. |
| RAILROADS-OIL(1000 BBL) | NA | NA | NA | NA | NA | 65. | 61. | 50. | 85. | 313. |
| COKE PL (1000 TONS COAL) | 727. | 972. | 1401. | 1542. | 1496. | 759. | 471. | 292. | 391. | 366. |
| VES FUEL OIL (1000 BBL) | NA | NA | NA | NA | NA | 1687. | 2003. | 1587. | 1661. | 4945. |
| CEMENT PL (1000 TONS) | 11. | 191. | NA | NA | NA | NA | NA | NA | NA | NA |

TABLE 2. FUEL CONSUMPTION 1950-1980 FOR THE STATE OF VIRGINIA

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL(1000 TONS) | | | | | | | | |
| ELECTRIC UTILITIES | 2870. | 3563. | 6262. | 8265. | 6653. | 3987. | 4711. | 5533. |
| INDUSTRIAL BOILERS | 3915. | 3659. | 3504. | 4017. | 3835. | 2362. | 1862. | 2984. |
| COMMERCIAL-RESIDENTIAL | 2148. | 1351. | 1285. | 787. | 550. | 212. | 54. | 193. |
| ANTHRACITE COAL (1000 TONS) | | | | | | | | |
| ALL USES | 111. | 61. | 18. | 39. | 10. | 30. | 40. | 11. |
| RESIDUAL OIL (1000 BBL) | | | | | | | | |
| ELECTRIC UTILITIES | 498. | 72. | 123. | 179. | 16982. | 25398. | 24991. | 14605. |
| INDUSTRIAL | 1409. | 1559. | 2688. | 3212. | 2273. | 6599. | 6521. | 5120. |
| COMMERCIAL | 6771. | 5633. | 2975. | 3289. | 10037. | 5462. | 4146. | 582. |
| DISTILLATE OIL (1000 BBL) | | | | | | | | |
| ELECTRIC UTILITIES | 363. | 52. | 103. | 41. | 721. | 2708. | 2563. | 887. |
| INDUSTRIAL | 325. | 454. | 879. | 950. | 1185. | 2369. | 3068. | 2039. |
| COMMERCIAL-RESIDENTIAL | 333. | 4592. | 13478. | 15188. | 18171. | 12950. | 13196. | 10680. |
| NATURAL GAS (10E6 CU. FT.) | | | | | | | | |
| ELECTRIC UTILITIES | 30. | 662. | 1438. | 1878. | 4276. | 496. | 977. | 2285. |
| INDUSTRIAL | 2868. | 14967. | 26052. | 39925. | 44572. | 36427. | 32979. | 54403. |
| PIPELINES | 106. | 2172. | 3935. | 6743. | 7779. | 3069. | 2683. | 8259. |
| COMMERCIAL-RESIDENTIAL | 10343. | 21745. | 38245. | 51113. | 79644. | 81160. | 97314. | 272361. |
| WOOD (1000 TONS) | | | | | | | | |
| ELECTRIC UTILITIES | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| INDUSTRIAL | 1162. | 1378. | 1484. | 1836. | 2179. | 1999. | 2632. | 2675. |
| COMMERCIAL | 53. | 41. | 33. | 25. | 19. | 20. | 30. | 41. |
| RESIDENTIAL | 2797. | 2156. | 1743. | 1291. | 1026. | 1075. | 1586. | 2143. |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE (1000 GAL.) | 758497. | 1058976. | 1302947. | 1593845. | NA | NA | NA | NA |
| DIESEL (1000 GAL.) | 16044. | 20874. | 39816. | 134652. | 169344. | 218568. | 249354. | 313572. |
| RURAL VMT (10E6 MILES) | NA | NA | NA | NA | 17625. | 18893. | 20809. | 19808. |
| URBAN VMT (10E6 MILES) | NA | NA | NA | NA | 10794. | 15748. | 19018. | 18724. |
| OTHER | | | | | | | | |
| RAILROADS-COAL(1000 TONS) | 2642. | 821. | 167. | 0. | 0. | 0. | 0. | 0. |
| -OIL(1000 BBL) | 1256. | 1793. | 1638. | 2427. | 3171. | 2087. | 2315. | 2687. |
| COKE PLANTS (1000 TONS COAL) | 0. | 274. | 553. | 897. | 27. | 0. | 484. | 664. |
| VESSELS-DISTILLATE(1000 BBL) | 75. | 209. | 203. | 97. | 107. | 121. | 158. | 189. |
| -RESIDUAL(1000 BBL) | 865. | 1995. | 1043. | 594. | 895. | 557. | 416. | 1072. |
| OFF HIGHWAY DIESEL (1000 BBL) | 196. | 370. | 483. | 874. | 1239. | 823. | 884. | 843. |
| CEMENT PLANT (1000 TONS) | 336. | 654. | 916. | 1130. | 39. | 40. | 90. | 79. |

TABLE 1. FUEL CONSUMPTION 1900-1945 FOR THE STATE OF WASHINGTON

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL(1000 TONS) | | | | | | | | | | |
| ELECTRIC UTILITIES | 38. | 63. | 86. | 115. | 103. | 42. | 6. | 3. | 4. | 5. |
| INDUSTRIAL BOILERS | 192. | 290. | 395. | 513. | 519. | 483. | 431. | 410. | 526. | 676. |
| COMMERCIAL-RESIDENTIAL | 261. | 412. | 588. | 842. | 911. | 1039. | 1072. | 801. | 766. | 969. |
| ANTHRACITE COAL (1000 TONS) | | | | | | | | | | |
| ALL USES | 1. | 2. | 2. | 2. | 2. | 1. | NA | NA | NA | NA |
| RESIDUAL OIL (1000 BBL) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | 1252. | 995. | 880. | 614. | 878. |
| INDUSTRIAL | NA | NA | NA | NA | NA | 2697. | 2578. | 2552. | 2126. | 4814. |
| COMMERCIAL | NA | NA | NA | NA | NA | 116. | 197. | 316. | 373. | 1431. |
| DISTILLATE OIL (1000 BBL) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | 114. | 90. | 80. | 7. | 157. |
| INDUSTRIAL | NA | NA | NA | NA | NA | 29. | 27. | 27. | 149. | 187. |
| COMMERCIAL -RESIDENTIAL | NA | NA | NA | NA | NA | 133. | 226. | 362. | 439. | 1386. |
| NATURAL GAS (10E6 CU. FT.) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | 0. | 0. | 0. | 0. | 0. | 0. |
| INDUSTRIAL | NA | NA | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | 0. | 0. | 0. | 0. | NA | NA | NA | NA |
| WOOD (1000 TONS) | | | | | | | | | | |
| ALL USES | 5908. | 5613. | 5377. | 5140. | 4904. | 4668. | 4431. | 4254. | 4136. | 3840. |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE(1000 GAL) | NA | NA | NA | NA | NA | 152242. | 243463. | 257351. | 356828. | 355206. |
| DIESEL (1000 GAL.) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL(1000 TONS) | 1249. | 1962. | 2648. | 3168. | 3531. | 2839. | 2366. | 1792. | 1880. | 2562. |
| RAILROADS-OIL(1000 BBL) | NA | NA | NA | NA | NA | 2759. | 2594. | 2126. | 1089. | 2022. |
| COKE PL (1000 TONS COAL) | 71. | 96. | 138. | 151. | 166. | 122. | 98. | 58. | 72. | 59. |
| VES FUEL OIL (1000 BBL) | NA | NA | NA | NA | NA | 2358. | 2799. | 2218. | 1144. | 3213. |
| CEMENT PL (1000 TONS) | 0. | NA | NA | 281. | 417. | 467. | NA | NA | NA | NA |

TABLE 2. FUEL CONSUMPTION 1950-1980 FOR THE STATE OF WASHINGTON

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL(1000 TONS) | | | | | | | | |
| ELECTRIC UTILITIES | 0. | 0. | 0. | 0. | 0. | 3718. | 4754. | 5140. |
| INDUSTRIAL BOILERS | 317. | 297. | 412. | 331. | 237. | 390. | 537. | 350. |
| COMMERCIAL-RESIDENTIAL | 631. | 397. | 226. | 182. | 46. | 13. | 46. | 161. |
| ANTHRACITE COAL (1000 TONS) | | | | | | | | |
| ALL USES | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| RESIDUAL OIL (1000 BBL) | | | | | | | | |
| ELECTRIC UTILITIES | 1262. | 1410. | 88. | 23. | 9. | 0. | 0. | 226. |
| INDUSTRIAL | 5640. | 8871. | 3586. | 3105. | 4381. | 4206. | 5282. | 6529. |
| COMMERCIAL | 413. | 786. | 3453. | 3554. | 4277. | 2333. | 1772. | 2804. |
| DISTILLATE OIL (1000 BBL) | | | | | | | | |
| ELECTRIC UTILITIES | 43. | 30. | 0. | 0. | 0. | 53. | 44. | 86. |
| INDUSTRIAL | 481. | 793. | 777. | 846. | 1634. | 2313. | 3322. | 1643. |
| COMMERCIAL-RESIDENTIAL | 1468. | 1972. | 12949. | 11694. | 12510. | 8036. | 7495. | 5491. |
| NATURAL GAS (10E6 CU. FT.) | | | | | | | | |
| ELECTRIC UTILITIES | 0. | 0. | 0. | 0. | 0. | 0. | 56. | 941. |
| INDUSTRIAL | 0. | 0. | 51233. | 80715. | 93147. | 92142. | 67668. | 63678. |
| PIPELINES | 0. | 0. | 413. | 688. | 6426. | 5855. | 6349. | 3663. |
| COMMERCIAL-RESIDENTIAL | 0. | 0. | 14478. | 28043. | 50419. | 66337. | 52767. | 188737. |
| WOOD (1000 TONS) | | | | | | | | |
| ELECTRIC UTILITIES | 15. | 7. | 2. | 0. | 0. | 0. | 0. | 0. |
| INDUSTRIAL | 1840. | 2182. | 2350. | 3112. | 3300. | 3131. | 3866. | 3304. |
| COMMERCIAL | 32. | 25. | 20. | 14. | 11. | 11. | 16. | 21. |
| RESIDENTIAL | 1658. | 1278. | 1033. | 726. | 557. | 596. | 830. | 1125. |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE (1000 GAL.) | 618953. | 798641. | 933296. | 1145327. | NA | NA | NA | NA |
| DIESEL (1000 GAL.) | 30450. | 23772. | 31710. | 42210. | 109788. | 126714. | 208152. | 231714. |
| RURAL VMT (10E6 MILES) | NA | NA | NA | NA | 8220. | 10200. | 11522. | 11276. |
| URBAN VMT (10E6 MILES) | NA | NA | NA | NA | 12491. | 13823. | 17856. | 17646. |
| OTHER | | | | | | | | |
| RAILROADS-COAL(1000 TONS) | 1396. | 453. | 95. | 47. | 21. | 0. | 0. | 0. |
| -OIL(1000 BBL) | 2631. | 1531. | 1360. | 1528. | 594. | 1813. | 2573. | 1897. |
| COKE PLANTS (1000 TONS COAL) | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| VESSELS-DISTILLATE(1000 BBL) | 118. | 111. | 104. | 113. | 149. | 220. | 327. | 301. |
| -RESIDUAL(1000 BBL) | 385. | 357. | 386. | 298. | 363. | 489. | 1389. | 1939. |
| OFF HIGHWAY DIESEL (1000 BBL) | 709. | 1028. | 1640. | 1787. | 673. | 569. | 1186. | 1159. |
| CEMENT PLANT (1000 TONS) | 946. | 1043. | 1146. | 1143. | 1254. | 1379. | 1880. | 1572. |

TABLE 1. FUEL CONSUMPTION 1900-1945 FOR THE STATE OF WEST VIRGINIA

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL(1000 TONS) | | | | | | | | | | |
| ELECTRIC UTILITIES | 138. | 228. | 312. | 416. | 769. | 1497. | 1716. | 1234. | 1954. | 2840. |
| INDUSTRIAL BOILERS | 1062. | 1708. | 2443. | 3301. | 3572. | 3640. | 3218. | 2853. | 3458. | 4250. |
| COMMERCIAL-RESIDENTIAL | 162. | 273. | 408. | 607. | 665. | 759. | 819. | 662. | 690. | 964. |
| ANTHRACITE COAL (1000 TONS) | | | | | | | | | | |
| ALL USES | 23. | 31. | 33. | 35. | 35. | 26. | NA | NA | NA | NA |
| RESIDUAL OIL (1000 BBL) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | 324. | 258. | 228. | 225. | 437. |
| INDUSTRIAL | NA | NA | NA | NA | NA | 707. | 676. | 669. | 889. | 733. |
| COMMERCIAL | NA | NA | NA | NA | NA | 7. | 11. | 18. | 1. | 74. |
| DISTILLATE OIL (1000 BBL) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | 4. | 3. | 3. | 3. | 11. |
| INDUSTRIAL | NA | NA | NA | NA | NA | 27. | 26. | 26. | 47. | 74. |
| COMMERCIAL -RESIDENTIAL | NA | NA | NA | NA | NA | 22. | 38. | 61. | 56. | 175. |
| NATURAL GAS (10E6 CU. FT.) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | 17. | 36. | 94. | 49. | 72. | 1607. |
| INDUSTRIAL | NA | NA | 63431. | 77033. | 79139. | 50266. | 38964. | 32889. | 50710. | 59334. |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | 13637. | 17893. | 21150. | 23984. | 23824. | 14353. | 26758. | 29423. |
| WOOD (1000 TONS) | | | | | | | | | | |
| ALL USES | 1688. | 1604. | 1536. | 1469. | 1401. | 1334. | 1266. | 1216. | 1182. | 1097. |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE(1000 GAL) | NA | NA | NA | NA | NA | 76315. | 134178. | 155315. | 216629. | 189140. |
| DIESEL (1000 GAL.) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL(1000 TONS) | 849. | 1420. | 2016. | 2516. | 3004. | 2637. | 2393. | 1970. | 2272. | 3436. |
| RAILROADS-OIL(1000 BBL) | NA | NA | NA | NA | NA | 10. | 10. | 8. | 81. | 27. |
| COKE PL (1000 TONS COAL) | 1561. | 2230. | 3409. | 3958. | 4416. | 3214. | 2953. | 2233. | 3753. | 4579. |
| VES FUEL OIL (1000 BBL) | NA | NA | NA | NA | NA | 1. | 1. | 1. | 17. | 77. |
| CEMENT PL (1000 TONS) | 0. | NA | NA | NA | NA | NA | NA | NA | NA | NA |

TABLE 2. FUEL CONSUMPTION 1950-1980 FOR THE STATE OF WEST VIRGINIA

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL(1000 TONS) | | | | | | | | |
| ELECTRIC UTILITIES | 3943. | 6352. | 5879. | 8025. | 14329. | 26336. | 25812. | 30491. |
| INDUSTRIAL BOILERS | 3254. | 3042. | 2290. | 6705. | 4760. | 3385. | 2700. | 2200. |
| COMMERCIAL-RESIDENTIAL | 647. | 407. | 243. | 242. | 226. | 110. | 67. | 129. |
| ANTHRACITE COAL (1000 TONS) | | | | | | | | |
| ALL USES | 0. | 0. | 0. | 0. | 0. | 29. | 14. | 9. |
| RESIDUAL OIL (1000 BBL) | | | | | | | | |
| ELECTRIC UTILITIES | 26. | 0. | 33. | 72. | 432. | 0. | 54. | 0. |
| INDUSTRIAL | 1460. | 1265. | 1319. | 1899. | 1065. | 942. | 1986. | 1461. |
| COMMERCIAL | 2. | 3. | 96. | 92. | 8948. | 575. | 1042. | 5. |
| DISTILLATE OIL (1000 BBL) | | | | | | | | |
| ELECTRIC UTILITIES | 10. | 22. | 0. | 0. | 2. | 707. | 1478. | 702. |
| INDUSTRIAL | 117. | 145. | 275. | 398. | 485. | 769. | 824. | 2050. |
| COMMERCIAL-RESIDENTIAL | 455. | 548. | 568. | 832. | 627. | 1353. | 1552. | 1890. |
| NATURAL GAS (10E6 CU. FT.) | | | | | | | | |
| ELECTRIC UTILITIES | 188. | 1367. | 941. | 417. | 705. | 358. | 14. | 62. |
| INDUSTRIAL | 83652. | 94777. | 91771. | 78020. | 90474. | 66155. | 59460. | 57017. |
| PIPELINES | 4136. | 7348. | 8440. | 17995. | 10448. | 15850. | 16469. | 15704. |
| COMMERCIAL-RESIDENTIAL | 44485. | 55881. | 65203. | 64169. | 79332. | 76072. | 75896. | 195572. |
| WOOD (1000 TONS) | | | | | | | | |
| ELECTRIC UTILITIES | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| INDUSTRIAL | 222. | 264. | 284. | 313. | 282. | 329. | 412. | 459. |
| COMMERCIAL | 14. | 11. | 9. | 7. | 6. | 7. | 11. | 17. |
| RESIDENTIAL | 777. | 599. | 484. | 372. | 334. | 347. | 604. | 898. |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE (1000 GAL.) | 360497. | 443372. | 485335. | 574531. | NA | NA | NA | NA |
| DIESEL (1000 GAL.) | 9912. | 10962. | 22470. | 26334. | 97020. | 74802. | 79212. | 121968. |
| RURAL VMT (10E6 MILES) | NA | NA | NA | NA | 5605. | 7204. | 7965. | 7647. |
| URBAN VMT (10E6 MILES) | NA | NA | NA | NA | 2796. | 3366. | 3543. | 3099. |
| OTHER | | | | | | | | |
| RAILROADS-COAL(1000 TONS) | 1888. | 587. | 119. | 0. | 0. | 0. | 0. | 0. |
| -OIL(1000 BBL) | 97. | 540. | 1104. | 702. | 1017. | 1064. | 1554. | 1759. |
| COKE PLANTS (1000 TONS COAL) | 4776. | 6316. | 4038. | 5261. | 5080. | 4481. | 3862. | 3694. |
| VESSELS-DISTILLATE(1000 BBL) | 3. | 7. | 22. | 51. | 11. | 118. | 130. | 35. |
| -RESIDUAL(1000 BBL) | 1. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| OFF HIGHWAY DIESEL (1000 BBL) | 6. | 60. | 42. | 224. | 253. | 344. | 886. | 1069. |
| CEMENT PLANT (1000 TONS) | 324. | 374. | 594. | 681. | 727. | 621. | 766. | 721. |

TABLE 1. FUEL CONSUMPTION 1900-1945 FOR THE STATE OF WISCONSIN

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL(1000 TONS) | | | | | | | | | | |
| ELECTRIC UTILITIES | 229. | 379. | 518. | 692. | 804. | 880. | 880. | 695. | 1200. | 1890. |
| INDUSTRIAL BOILERS | 1484. | 2060. | 2592. | 3127. | 3963. | 5311. | 4970. | 4169. | 4809. | 5658. |
| COMMERCIAL-RESIDENTIAL | 1312. | 1903. | 2520. | 3367. | 3550. | 4049. | 4326. | 3443. | 3532. | 4846. |
| ANTHRACITE COAL (1000 TONS) | | | | | | | | | | |
| ALL USES | 1129. | 1530. | 1650. | 1730. | 1745. | 1303. | 276. | 209. | 347. | 471. |
| RESIDUAL OIL (1000 BBL) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | 324. | 258. | 228. | 225. | 437. |
| INDUSTRIAL | NA | NA | NA | NA | NA | 509. | 487. | 482. | 410. | 623. |
| COMMERCIAL | NA | NA | NA | NA | NA | 14. | 23. | 37. | 36. | 20. |
| DISTILLATE OIL (1000 BBL) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | 67. | 53. | 47. | 163. | 139. |
| INDUSTRIAL | NA | NA | NA | NA | NA | 204. | 195. | 193. | 294. | 470. |
| COMMERCIAL -RESIDENTIAL | NA | NA | NA | NA | NA | 67. | 115. | 184. | 393. | 591. |
| NATURAL GAS (10E6 CU. FT.) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | 0. | 0. | 0. | 0. | 0. | 0. |
| INDUSTRIAL | NA | NA | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| WOOD (1000 TONS) | | | | | | | | | | |
| ALL USES | 4550. | 4323. | 4141. | 3959. | 3777. | 3595. | 3413. | 3276. | 3185. | 2958. |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE(1000 GAL) | NA | NA | NA | NA | NA | 235280. | 416226. | 408233. | 532770. | 483011. |
| DIESEL (1000 GAL.) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL(1000 TONS) | 1427. | 2060. | 2567. | 2850. | 3087. | 2483. | 2069. | 1567. | 1643. | 2240. |
| RAILROADS-OIL(1000 BBL) | NA | NA | NA | NA | NA | 47. | 44. | 36. | 69. | 239. |
| COKE PL (1000 TONS COAL) | 609. | 748. | 987. | 990. | 821. | 216. | 36. | 69. | 180. | 293. |
| VES FUEL OIL (1000 BBL) | NA | NA | NA | NA | NA | NA | NA | NA | 4. | 3. |
| CEMENT PL (1000 TONS) | 0. | 0. | 0. | 0. | NA | NA | NA | NA | NA | NA |

TABLE 2. FUEL CONSUMPTION 1950-1980 FOR THE STATE OF WISCONSIN

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL(1000 TONS) | | | | | | | | |
| ELECTRIC UTILITIES | 2919. | 4093. | 5195. | 6699. | 10986. | 11598. | 12062. | 14339. |
| INDUSTRIAL BOILERS | 1986. | 1857. | 3979. | 5289. | 4447. | 1842. | 2041. | 2091. |
| COMMERCIAL-RESIDENTIAL | 1561. | 982. | 2743. | 2017. | 1523. | 382. | 72. | 51. |
| ANTHRACITE COAL (1000 TONS) | | | | | | | | |
| ALL USES | 765. | 296. | 61. | 21. | 14. | 4. | 3. | 3. |
| RESIDUAL OIL (1000 BBL) | | | | | | | | |
| ELECTRIC UTILITIES | 9. | 29. | 17. | 46. | 1127. | 270. | 75. | 76. |
| INDUSTRIAL | 907. | 872. | 1972. | 1346. | 783. | 552. | 976. | 1410. |
| COMMERCIAL | 28. | 71. | 1886. | 1318. | 966. | 958. | 1047. | 44. |
| DISTILLATE OIL (1000 BBL) | | | | | | | | |
| ELECTRIC UTILITIES | 299. | 143. | 6. | 23. | 128. | 646. | 2315. | 552. |
| INDUSTRIAL | 566. | 667. | 13. | 572. | 697. | 595. | 719. | 988. |
| COMMERCIAL-RESIDENTIAL | 1917. | 2604. | 19324. | 25278. | 22473. | 19578. | 21501. | 9984. |
| NATURAL GAS (10E6 CU. FT.) | | | | | | | | |
| ELECTRIC UTILITIES | 13. | 56. | 2068. | 12797. | 12944. | 19935. | 8312. | 13739. |
| INDUSTRIAL | 3213. | 10491. | 34860. | 84747. | 141250. | 152443. | 153984. | 129532. |
| PIPELINES | 650. | 404. | 540. | 1531. | 6567. | 4957. | 1667. | 8246. |
| COMMERCIAL-RESIDENTIAL | 11517. | 29726. | 58300. | 102983. | 159763. | 187466. | 206763. | 550303. |
| WOOD (1000 TONS) | | | | | | | | |
| ELECTRIC UTILITIES | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 34. |
| INDUSTRIAL | 879. | 1043. | 1123. | 1409. | 1519. | 1913. | 2720. | 2585. |
| COMMERCIAL | 35. | 27. | 22. | 16. | 13. | 13. | 21. | 29. |
| RESIDENTIAL | 1816. | 1400. | 1132. | 865. | 692. | 683. | 1097. | 1526. |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE (1000 GAL.) | 829091. | 1059263. | 1254684. | 1474412. | NA | NA | NA | NA |
| DIESEL (1000 GAL.) | 14238. | 13734. | 17514. | 51114. | 150066. | 188412. | 287658. | 300426. |
| RURAL VMT (10E6 MILES) | NA | NA | NA | NA | 14165. | 14442. | 18308. | 16703. |
| URBAN VMT (10E6 MILES) | NA | NA | NA | NA | 10398. | 14142. | 15556. | 14530. |
| OTHER | | | | | | | | |
| RAILROADS-COAL(1000 TONS) | 1221. | 396. | 83. | 41. | 19. | 0. | 0. | 0. |
| -OIL(1000 BBL) | 725. | 1248. | 1296. | 865. | 1121. | 871. | 980. | 1237. |
| COKE PLANTS (1000 TONS COAL) | 448. | 485. | 404. | 464. | 352. | 253. | 146. | 178. |
| VESSELS-DISTILLATE(1000 BBL) | 1. | 5. | 8. | 16. | 13. | 13. | 46. | 43. |
| -RESIDUAL(1000 BBL) | 0. | 41. | 61. | 74. | 1. | 71. | 119. | 45. |
| OFF HIGHWAY DIESEL (1000 BBL) | 154. | 317. | 504. | 978. | 1119. | 792. | 758. | 569. |
| CEMENT PLANT (1000 TONS) | 299. | 391. | 439. | 453. | 87. | 86. | 305. | 236. |

TABLE 1. FUEL CONSUMPTION 1900-1945 FOR THE STATE OF WYOMING

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL(1000 TONS) | | | | | | | | | | |
| ELECTRIC UTILITIES | 47. | 78. | 107. | 143. | 150. | 128. | 103. | 73. | 113. | 161. |
| INDUSTRIAL BOILERS | 243. | 290. | 305. | 296. | 298. | 343. | 298. | 240. | 267. | 302. |
| COMMERCIAL-RESIDENTIAL | 246. | 306. | 339. | 366. | 351. | 400. | 406. | 294. | 269. | 323. |
| ANTHRACITE COAL (1000 TONS) | | | | | | | | | | |
| ALL USES | 0. | 0. | 0. | 0. | 0. | 0. | NA | NA | NA | NA |
| RESIDUAL OIL (1000 BBL) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | 7. | 6. | 5. | 11. | 16. |
| INDUSTRIAL | NA | NA | NA | NA | NA | 527. | 504. | 499. | 627. | 953. |
| COMMERCIAL | NA | NA | NA | NA | NA | 8. | 13. | 21. | 30. | 1632. |
| DISTILLATE OIL (1000 BBL) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | 4. | 3. | 3. | 3. | 11. |
| INDUSTRIAL | NA | NA | NA | NA | NA | 10. | 9. | 9. | 16. | 62. |
| COMMERCIAL -RESIDENTIAL | NA | NA | NA | NA | NA | 13. | 22. | 36. | 92. | 898. |
| NATURAL GAS (10E6 CU. FT.) | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | 36. | 74. | 194. | 537. | 785. | 332. |
| INDUSTRIAL | NA | NA | NA | NA | 9254. | 42258. | 36508. | 7784. | 12002. | 14648. |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | NA | 62. | 1058. | 2169. | 3517. | 2506. | 4672. | 6994. |
| WOOD (1000 TONS) | | | | | | | | | | |
| ALL USES | 222. | 211. | 202. | 193. | 184. | 175. | 166. | 160. | 155. | 144. |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE(1000 GAL) | NA | NA | NA | NA | NA | 19032. | 32985. | 43670. | 62179. | 55271. |
| DIESEL (1000 GAL.) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL(1000 TONS) | 549. | 681. | 709. | 628. | 611. | 492. | 410. | 310. | 326. | 444. |
| RAILROADS-OIL(1000 BBL) | NA | NA | NA | NA | NA | 1513. | 1423. | 1166. | 1134. | 2214. |
| COKE PL (1000 TONS COAL) | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| VES FUEL OIL (1000 BBL) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CEMENT PL (1000 TONS) | 0. | 0. | 0. | 0. | NA | NA | NA | NA | NA | NA |

TABLE 2. FUEL CONSUMPTION 1950-1980 FOR THE STATE OF WYOMING

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL(1000 TONS) | | | | | | | | |
| ELECTRIC UTILITIES | 201. | 337. | 815. | 1941. | 3589. | 7283. | 11551. | 16547. |
| INDUSTRIAL BOILERS | 141. | 132. | 115. | 222. | 195. | 539. | 1513. | 1662. |
| COMMERCIAL-RESIDENTIAL | 117. | 74. | 57. | 44. | 25. | 33. | 58. | 105. |
| ANTHRACITE COAL (1000 TONS) | | | | | | | | |
| ALL USES | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| RESIDUAL OIL (1000 BBL) | | | | | | | | |
| ELECTRIC UTILITIES | 10. | 7. | 31. | 29. | 9. | 0. | 0. | 0. |
| INDUSTRIAL | 1375. | 1065. | 434. | 618. | 623. | 1377. | 1614. | 2100. |
| COMMERCIAL | 13. | 35. | 330. | 282. | 340. | 638. | 1281. | 27. |
| DISTILLATE OIL (1000 BBL) | | | | | | | | |
| ELECTRIC UTILITIES | 12. | 80. | 0. | 7. | 13. | 109. | 143. | 145. |
| INDUSTRIAL | 402. | 578. | 722. | 792. | 871. | 1195. | 1970. | 3630. |
| COMMERCIAL-RESIDENTIAL | 282. | 487. | 221. | 519. | 859. | 1421. | 1581. | 488. |
| NATURAL GAS (10E6 CU. FT.) | | | | | | | | |
| ELECTRIC UTILITIES | 1127. | 975. | 671. | 46. | 2373. | 819. | 713. | 222. |
| INDUSTRIAL | 26751. | 24274. | 40200. | 40785. | 50079. | 43618. | 37228. | 30410. |
| PIPELINES | 138. | 12082. | 1755. | 2209. | 45159. | 20370. | 27357. | 23612. |
| COMMERCIAL-RESIDENTIAL | 9748. | 14207. | 13708. | 18784. | 32010. | 22381. | 21994. | 32474. |
| WOOD (1000 TONS) | | | | | | | | |
| ELECTRIC UTILITIES | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| INDUSTRIAL | 17. | 20. | 22. | 30. | 33. | 26. | 47. | 38. |
| COMMERCIAL | 2. | 1. | 1. | 1. | 1. | 1. | 2. | 3. |
| RESIDENTIAL | 114. | 88. | 71. | 59. | 57. | 64. | 102. | 143. |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE (1000 GAL.) | 121673. | 158307. | 183846. | 199567. | NA | NA | NA | NA |
| DIESEL (1000 GAL.) | 5754. | 8442. | 12600. | 24444. | 43302. | 65268. | 94248. | 92652. |
| RURAL VMT (10E6 MILES) | NA | NA | NA | NA | 2475. | 2951. | 3787. | 4001. |
| URBAN VMT (10E6 MILES) | NA | NA | NA | NA | 570. | 731. | 999. | 1007. |
| OTHER | | | | | | | | |
| RAILROADS-COAL(1000 TONS) | 242. | 79. | 17. | 8. | 4. | 0. | 0. | 0. |
| -OIL(1000 BBL) | 2404. | 2136. | 2378. | 2433. | 2664. | 2306. | 2737. | 4167. |
| COKE PLANTS (1000 TONS COAL) | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| VESSELS-DISTILLATE(1000 BBL) | 0. | 0. | 0. | 1. | 0. | 0. | 0. | 0. |
| -RESIDUAL(1000 BBL) | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| OFF HIGHWAY DIESEL (1000 BBL) | 160. | 193. | 596. | 681. | 493. | 918. | 1538. | 1921. |
| CEMENT PLANT (1000 TONS) | 84. | 114. | 108. | 149. | 161. | 191. | 201. | 190. |

FOOTNOTES TO FUEL CONSUMPTION DATA

| Source Category | YEAR 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| | Footnote | | | | | | | |
| Bituminous Coal | | | | | | | | |
| Electric Utilities | | | | | l | l | | |
| Industrial Boilers | r | i | | | l | l | | |
| Commercial-Residential | r | i | | | l | l | | |
| Residual Oil [f] | | | | | | | | |
| Electric Utilities | | | | | | | | |
| Industrial Boilers | d | d | | | d | d | d | d |
| Commercial-Residential | j | j | | | c | c | c | c |
| Distillate Oil [b,f] | | | | | | | | |
| Electric Utilities | | | | | | | | |
| Industrial Boilers | d | d | | | d | d | d | d |
| Commercial-Residential | j,q | j,q | | | c,p,q | c,p,q | c,p,q | c,p |
| Natural Gas | | | | | | | | |
| Electric Utilities | n | n | | | | | | |
| Industrial | e,k,p | e,k,p | e | e | p | p | | |
| Pipelines | | | g | g | e | e | e | e |
| Commercial-Residential | | | | | a,m | a,m | a,m | a,m |
| Wood | s | t | | | | | | |
| Highway Vehicles - Diesel | | | | | h | | | |
| Off-Highway Diesel | t | | | | h | | | |

[a]Includes gas delivered to municipalities and Government agencies for use in schools, institutions, street lighting, etc.

[b]Includes No. 1 and No. 2 distillate oil and kerosene.

[c]Includes fuel for operating machinery, space heating, fueling of vessels and trucks, and other operations by the U.S. Armed Forces.

[d]Includes oil company use for the operation of drilling equipment, other field or refinery operations, and space heating at petroleum refineries, pipeline companies, and oil-drilling companies.

[e]Includes natural gas used in lease operations as gas processing plant fuel, and net used for gas lift.

[f]Does not include fueling of commercial or private boats, such as pleasure craft, fishing boats, tugboats and ocean-going vessels.

[g]The fuel consumption reported in Reference 40 for the sector entitled, "Transportation" was used for the pipeline category.

[h]Values shown are for the year 1971.

[i]Values shown are for the year 1954.

FOOTNOTES TO FUEL CONSUMPTION DATA
(concluded)

[j]The distillate and residual oil sales for 1950 and 1955 was calculated as follows:
Distillate = Kerosene heating + Military + Miscellaneous
Residual = Military + Miscellaneous

[k]Calculated by subtracting the fuel consumption reported for pipelines from the fuel consumption reported for total industrial to avoid double counting of pipelines.

[l]From References 35 and 36, the category "Retail Dealers" was assumed to be commercial and "All Others (which exclude vessel fuel and bunker fuel)" was assumed to be industrial.

[m]Includes "other consumers".

[n]Includes natural gas used by petroleum refineries and for carbon black production.

[o]Includes some manufactured gas.

[p]Includes natural gas used in portland cement plants, carbon black manufacture and petroleum refineries.

[q]Includes consumption reported for commercial-residential sector, military (No. 1 and No. 2 distillate), and commercial-residential (kerosene).

[r]Includes kerosene used for space heating in industrial and commercial operations.

[s]Estimated by using the following ratio:

$$\text{State}_{1950} = \frac{\text{National Consumption 1955}}{\text{National Consumption 1950}} \times \text{State Industrial 1955}$$

The same ratio was used for commercial-residential source category.

[t]Based on the ratio of national wood consumption in 1950 and 1955 to the national consumption in 1960 as follows:

$$\text{State 1955} = \frac{\text{National Consumption 1955}}{\text{National Consumption 1960}} \times \text{State 1960}$$

[u]Based on 1953 diesel oil consumption data.

# SECTION 2.0

# STATE $SO_2$ EMISSIONS

TABLE 3. SO2 EMISSIONS (1000 TONS) 1900-1945 ALABAMA

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | | | |
| ELECTRIC UTILITIES | 3.5 | 5.7 | 7.9 | 10.5 | 12.6 | 14.8 | 17.6 | 16.5 | 32.4 | 56.1 |
| INDUSTRIAL BOILERS | 30.4 | 43.5 | 56.4 | 70.1 | 74.1 | 76.7 | 60.9 | 44.8 | 45.0 | 45.5 |
| COMMERCIAL-RESIDENTIAL | 9.0 | 13.5 | 18.4 | 25.3 | 26.9 | 30.7 | 32.1 | 24.5 | 23.9 | 31.2 |
| ANTHRACITE COAL | | | | | | | | | | |
| ALL USES | .1 | .1 | .1 | .1 | .1 | .1 | NA | NA | NA | NA |
| RESIDUAL OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | NA | NA | NA | NA | NA | .6 | .6 | .6 | .9 | 3.8 |
| COMMERCIAL | NA | NA | NA | NA | NA | .1 | .2 | .3 | .6 | .9 |
| DISTILLATE OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | NA | NA | NA | NA | NA | .0 | .0 | .0 | .1 | .2 |
| COMMERCIAL-RESIDENTIAL | NA | NA | NA | NA | NA | .0 | .1 | .1 | .3 | .6 |
| NATURAL GAS | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | NA | NA | .0 | .0 | .0 |
| INDUSTRIAL | NA | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| WOOD | | | | | | | | | | |
| ALL USES | .5 | .5 | .5 | .5 | .4 | .4 | .4 | .4 | .4 | .3 |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE | .0 | .0 | .0 | .0 | .1 | .2 | .4 | .4 | .6 | .7 |
| DIESEL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL | 27.9 | 41.5 | 53.3 | 61.0 | 70.6 | 61.9 | 56.2 | 46.3 | 53.3 | 80.6 |
| -OIL | NA | NA | NA | NA | NA | .2 | .1 | .1 | .1 | .5 |
| COKE PLANTS | .1 | .1 | .1 | .2 | .2 | .2 | .2 | .1 | .2 | .2 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS FUEL OIL | NA | NA | NA | NA | NA | 8.1 | 9.6 | 7.6 | 6.4 | 11.5 |
| CEMENT PLANTS | .0 | NA | NA | NA | NA | 8.5 | 6.5 | 3.4 | 6.9 | 7.5 |
| WILD FIRES | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 1.1 | 1.4 | .6 | .5 |
| MISCELLANEOUS | 28.5 | 31.1 | 34.0 | 35.6 | 36.8 | 40.8 | 43.9 | 42.9 | 41.9 | 51.1 |

TABLE 4. SO2 EMISSIONS (1000 TONS) 1950-1980 ALABAMA

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | |
| ELECTRIC UTILITIES | 41.8 | 204.2 | 311.6 | 539.3 | 758.1 | 884.6 | 491.2 | 560.2 |
| INDUSTRIAL BOILERS | 28.6 | 26.7 | 9.2 | 72.8 | 52.3 | 77.4 | 111.4 | 84.5 |
| COMMERCIAL-RESIDENTIAL | 22.3 | 14.1 | 8.1 | 2.9 | 3.2 | .4 | 1.1 | 4.9 |
| ANTHRACITE COAL | | | | | | | | |
| ALL USES | .0 | .0 | .4 | .6 | .0 | .0 | .0 | .7 |
| RESIDUAL OIL | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | NA | .0 |
| INDUSTRIAL | 5.2 | 6.7 | 8.8 | 4.0 | 8.3 | 16.9 | 32.9 | 24.2 |
| COMMERCIAL | .3 | .6 | .7 | .4 | 1.2 | 21.2 | 20.3 | 3.8 |
| DISTILLATE OIL | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .3 | .5 | .1 |
| INDUSTRIAL | 1.0 | .8 | 1.1 | .3 | .6 | .8 | 1.1 | 1.0 |
| COMMERCIAL-RESIDENTIAL | 1.0 | 1.8 | .8 | .6 | .9 | 2.1 | 2.8 | .7 |
| NATURAL GAS | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | .0 | .0 | .0 | .0 | .1 | .0 | .0 | .0 |
| PIPELINES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| COMMERCIAL-RESIDENTIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| WOOD | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | .1 | .1 | .1 | .1 | .1 | .1 | .2 | .2 |
| COMMERCIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDENTIAL | .4 | .3 | .3 | .2 | .1 | .1 | .1 | .2 |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE | 1.3 | 1.8 | 2.1 | 2.6 | 2.8 | 3.9 | 4.8 | 4.7 |
| DIESEL | .2 | .2 | .4 | .9 | 2.1 | 3.2 | 4.6 | 5.5 |
| OTHER | | | | | | | | |
| RAILROADS-COAL | 44.3 | 13.8 | 2.9 | .0 | .0 | .0 | .0 | .0 |
| -OIL | .8 | 1.4 | 1.7 | 1.9 | 2.4 | 3.3 | 3.4 | 3.5 |
| COKE PLANTS | 32.0 | 33.3 | 18.6 | 20.0 | 17.2 | 16.5 | 10.9 | 11.8 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS-DISTILLATE | .0 | .0 | .0 | .0 | .1 | .1 | .2 | .1 |
| -RESIDUAL | 1.4 | 3.2 | 2.8 | 1.5 | 2.1 | 8.8 | 9.1 | 3.9 |
| OFF HIGHWAY DIESEL | .2 | .2 | .7 | .4 | .9 | .8 | 1.8 | .4 |
| CEMENT PLANT | 14.0 | 16.4 | 16.1 | 19.2 | 16.5 | 15.1 | 20.5 | 17.7 |
| WILD FIRES | .3 | .1 | .1 | .1 | .1 | .0 | .2 | .1 |
| MISCELLANEOUS | 60.7 | 61.1 | 62.0 | 66.0 | 69.2 | 60.9 | 63.5 | 59.8 |

TABLE 3. SO2 EMISSIONS (1000 TONS) 1900-1945 ARIZONA

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL BOILERS | .2 | .3 | .4 | .6 | 1.6 | 3.2 | 3.2 | 2.4 | 2.6 | 2.8 |
| COMMERCIAL-RESIDENTIAL | .3 | .5 | .8 | 1.3 | 1.4 | 1.6 | 1.7 | 1.2 | 1.2 | 1.5 |
| ANTHRACITE COAL | | | | | | | | | | |
| ALL USES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDUAL OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | 2.3 | 1.8 | 1.6 | 2.0 | .6 |
| INDUSTRIAL | NA | NA | NA | NA | NA | 9.7 | 9.3 | 9.2 | 5.1 | 6.1 |
| COMMERCIAL | NA | NA | NA | NA | NA | .0 | .1 | .1 | .3 | NA |
| DISTILLATE OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .1 | .1 | .1 | .1 | .0 |
| INDUSTRIAL | NA | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .1 |
| COMMERCIAL-RESIDENTIAL | NA | NA | NA | NA | NA | .1 | .1 | .2 | .2 | .4 |
| NATURAL GAS | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| WOOD | | | | | | | | | | |
| ALL USES | .1 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE | .0 | .0 | .0 | .0 | .0 | .1 | .2 | .2 | .2 | .3 |
| DIESEL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL | 3.6 | 6.5 | 9.7 | 12.6 | 14.5 | 11.6 | 9.7 | 7.3 | 7.7 | 10.5 |
| -OIL | NA | NA | NA | NA | NA | 2.8 | 2.7 | 2.2 | 2.4 | 2.1 |
| COKE PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| SMELTERS-COPPER | 117.5 | 237.2 | 316.9 | 441.2 | 518.8 | 702.2 | 519.4 | 292.5 | 625.2 | 605.6 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS FUEL OIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CEMENT PLANTS | .0 | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| WILD FIRES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| MISCELLANEOUS | 13.2 | 14.8 | 16.5 | 17.8 | 18.7 | 21.2 | 23.2 | 23.0 | 22.9 | 30.8 |

TABLE 4. SO2 EMISSIONS (1000 TONS) 1950-1980 ARIZONA

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | 8.4 | 4.0 | 31.6 | 55.4 | 81.0 |
| INDUSTRIAL BOILERS | 1.5 | 1.4 | 1.7 | 1.8 | .4 | 1.1 | 4.3 | 6.5 |
| COMMERCIAL-RESIDENTIAL | .4 | .3 | .3 | .9 | .0 | .0 | .0 | .0 |
| ANTHRACITE COAL | | | | | | | | |
| ALL USES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDUAL OIL | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .2 | .1 | .0 | .0 | 12.1 | 7.3 | 2.3 |
| INDUSTRIAL | .9 | .1 | .4 | .0 | .2 | .7 | 2.7 | .7 |
| COMMERCIAL | .1 | .0 | .0 | .1 | .1 | .0 | .0 | .1 |
| DISTILLATE OIL | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | 4.4 | 1.4 | 1.4 |
| INDUSTRIAL | .2 | .3 | .7 | .6 | 1.0 | 2.3 | 2.8 | 1.3 |
| COMMERCIAL-RESIDENTIAL | .5 | .7 | .3 | .2 | .2 | .7 | 1.3 | .2 |
| NATURAL GAS | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| PIPELINES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| COMMERCIAL-RESIDENTIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| WOOD | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| COMMERCIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDENTIAL | .1 | .0 | .0 | .0 | .0 | .0 | .1 | .1 |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE | .5 | .8 | 1.1 | 1.4 | 1.9 | 2.5 | 3.1 | 3.0 |
| DIESEL | .2 | .2 | .3 | .4 | 1.9 | 2.4 | 3.4 | 3.7 |
| OTHER | | | | | | | | |
| RAILROADS-COAL | 5.7 | 1.9 | 5.3 | .3 | .0 | .0 | .0 | .0 |
| -OIL | 1.6 | .1 | 1.1 | 1.4 | 1.2 | 1.3 | 1.9 | 1.6 |
| COKE PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| SMELTERS-COPPER | 1037.4 | 1168.4 | 1386.8 | 1809.1 | 2194.9 | 1324.9 | 772.4 | 636.3 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS-DISTILLATE | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -RESIDUAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| OFF HIGHWAY DIESEL | .1 | .2 | .4 | .6 | .2 | .2 | .8 | .5 |
| CEMENT PLANT | 2.3 | 3.1 | 4.1 | 4.1 | 5.1 | 6.2 | 7.3 | 6.6 |
| WILD FIRES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .2 |
| MISCELLANEOUS | 39.0 | 41.1 | 43.4 | 49.8 | 54.3 | 48.7 | 50.7 | 47.7 |

TABLE 3. SO2 EMISSIONS (1000 TONS) 1900-1945 ARKANSAS

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | | | |
| ELECTRIC UTILITIES | 2.3 | 3.8 | 5.2 | 6.9 | 8.2 | 9.3 | 8.0 | 4.7 | 5.8 | 5.9 |
| INDUSTRIAL BOILERS | 10.4 | 14.9 | 19.5 | 24.3 | 22.4 | 17.4 | 11.5 | 7.7 | 6.9 | 5.8 |
| COMMERCIAL-RESIDENTIAL | 6.8 | 10.2 | 14.0 | 19.2 | 20.5 | 23.4 | 22.9 | 15.3 | 12.5 | 12.6 |
| ANTHRACITE COAL | | | | | | | | | | |
| ALL USES | .0 | .0 | .0 | .0 | .0 | .0 | NA | NA | NA | NA |
| RESIDUAL OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | NA | NA | NA | NA | .2 |
| INDUSTRIAL | NA | NA | NA | NA | NA | 1.2 | 1.1 | 1.1 | 1.5 | .9 |
| COMMERCIAL | NA | NA | NA | NA | NA | .7 | 1.1 | 1.8 | 1.4 | .3 |
| DISTILLATE OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .1 | .0 | .0 | .1 | .0 |
| INDUSTRIAL | NA | NA | NA | NA | NA | .2 | .2 | .2 | .0 | .1 |
| COMMERCIAL-RESIDENTIAL | NA | NA | NA | NA | NA | .1 | .2 | .3 | .5 | .9 |
| NATURAL GAS | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | NA | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| WOOD | | | | | | | | | | |
| ALL USES | .4 | .4 | .4 | .4 | .4 | .3 | .3 | .3 | .3 | .3 |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE | .0 | .0 | .0 | .0 | .1 | .2 | .3 | .3 | .4 | .5 |
| DIESEL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL | 43.0 | 64.3 | 82.8 | 95.1 | 104.4 | 84.0 | 69.9 | 53.0 | 55.6 | 75.8 |
| -OIL | NA | NA | NA | NA | NA | 2.3 | 2.2 | 1.8 | 1.6 | 2.6 |
| COKE PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | 10.2 | 15.0 | 7.7 | 5.7 | 23.4 | 17.0 |
| VESSELS FUEL OIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | .3 |
| CEMENT PLANTS | .0 | NA | .0 | .0 | .0 | .0 | NA | NA | NA | NA |
| WILD FIRES | 5.3 | 5.3 | 5.3 | 5.3 | 5.3 | 5.3 | 3.3 | 1.0 | 1.0 | .1 |
| MISCELLANEOUS | 11.6 | 12.7 | 13.9 | 14.1 | 14.3 | 15.6 | 16.7 | 15.9 | 14.9 | 15.8 |

TABLE 4. SO2 EMISSIONS (1000 TONS) 1950-1980 ARKANSAS

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | |
| ELECTRIC UTILITIES | .4 | .0 | .0 | .0 | .0 | .0 | 13.2 | 25.1 |
| INDUSTRIAL BOILERS | .0 | 3.1 | 1.6 | 1.8 | .0 | 1.2 | 12.1 | 14.7 |
| COMMERCIAL-RESIDENTIAL | .1 | .1 | .0 | .0 | .0 | .0 | .0 | .3 |
| ANTHRACITE COAL | | | | | | | | |
| ALL USES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDUAL OIL | | | | | | | | |
| ELECTRIC UTILITIES | .5 | .3 | .4 | .0 | 9.2 | 15.9 | 49.6 | 12.8 |
| INDUSTRIAL | .8 | .6 | 2.1 | 1.8 | 1.1 | 16.9 | 18.0 | 8.0 |
| COMMERCIAL | .0 | .0 | .0 | .0 | .0 | 7.8 | 2.4 | 2.4 |
| DISTILLATE OIL | | | | | | | | |
| ELECTRIC UTILITIES | .1 | .0 | .0 | .0 | .0 | .1 | 1.2 | .3 |
| INDUSTRIAL | .2 | .1 | .1 | .1 | .2 | .5 | .8 | .3 |
| COMMERCIAL-RESIDENTIAL | 1.7 | 1.4 | .3 | .4 | 1.0 | 2.2 | 1.5 | .3 |
| NATURAL GAS | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| PIPELINES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| COMMERCIAL-RESIDENTIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| WOOD | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | .0 | .1 | .1 | .1 | .1 | .1 | .1 | .1 |
| COMMERCIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDENTIAL | .4 | .3 | .2 | .2 | .1 | .1 | .1 | .1 |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE | .8 | 1.1 | 1.2 | 1.6 | 1.8 | 2.2 | 2.6 | 2.6 |
| DIESEL | .1 | .1 | .2 | .4 | 1.7 | 2.4 | 3.6 | 3.6 |
| OTHER | | | | | | | | |
| RAILROADS-COAL | 41.3 | 13.4 | 2.3 | 1.2 | .7 | .0 | .0 | .0 |
| -OIL | 3.1 | 1.1 | .8 | 1.3 | 1.4 | 2.9 | 1.8 | 2.0 |
| COKE PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | 12.1 | 14.8 | .7 | .0 | .0 | .0 | .0 | .0 |
| VESSELS-DISTILLATE | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -RESIDUAL | .1 | .1 | .0 | .0 | .0 | .0 | .0 | .0 |
| OFF HIGHWAY DIESEL | .2 | .2 | .5 | .4 | .6 | .6 | 1.2 | .9 |
| CEMENT PLANT | 2.1 | 2.7 | 3.0 | 3.3 | 4.3 | 4.6 | 5.7 | 5.7 |
| WILD FIRES | .1 | .1 | .2 | .1 | .1 | .0 | .0 | .1 |
| MISCELLANEOUS | 16.9 | 15.5 | 14.3 | 13.1 | 12.1 | 8.9 | 9.2 | 8.6 |

TABLE 3. SO2 EMISSIONS (1000 TONS) 1900-1945 CALIFORNIA

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL BOILERS | 5.2 | 6.6 | 7.6 | 8.4 | 6.2 | 2.5 | 1.0 | 1.1 | 1.5 | 2.0 |
| COMMERCIAL-RESIDENTIAL | 2.6 | 3.5 | 4.3 | 5.3 | 5.4 | 6.1 | 6.0 | 4.0 | 3.3 | 3.4 |
| ANTHRACITE COAL | | | | | | | | | | |
| ALL USES | .0 | .0 | .0 | .0 | .0 | .0 | NA | NA | NA | NA |
| RESIDUAL OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | 3.1 | 2.4 | 2.1 | 1.3 | 6.9 |
| INDUSTRIAL | NA | NA | NA | NA | NA | 65.5 | 62.6 | 62.0 | 88.5 | 109.1 |
| COMMERCIAL | NA | NA | NA | NA | NA | 19.7 | 33.5 | 53.7 | 66.5 | 319.7 |
| DISTILLATE OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .1 | .1 | .1 | .0 | .1 |
| INDUSTRIAL | NA | NA | NA | NA | NA | .3 | .3 | .3 | .7 | .9 |
| COMMERCIAL-RESIDENTIAL | NA | NA | NA | NA | NA | 2.3 | 4.0 | 6.4 | 4.1 | 9.8 |
| NATURAL GAS | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | NA | NA | .0 | .0 | .0 | .1 | .1 | .0 | .1 | .1 |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .1 |
| WOOD | | | | | | | | | | |
| ALL USES | .8 | .8 | .8 | .7 | .7 | .7 | .6 | .6 | .6 | .5 |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE | .0 | .0 | .0 | .2 | .8 | 1.8 | 2.8 | 3.2 | 4.3 | 4.4 |
| DIESEL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL | 47.1 | 62.9 | 72.0 | 72.7 | 75.6 | 60.8 | 50.6 | 38.4 | 40.2 | 54.9 |
| -OIL | NA | NA | NA | NA | NA | 25.8 | 24.3 | 19.9 | 19.7 | 36.3 |
| COKE PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| SMELTERS-COPPER | 28.3 | 17.5 | 48.8 | 38.4 | 11.1 | 45.6 | 23.9 | 1.7 | 14.2 | 13.6 |
| -LEAD | .2 | 1.3 | 1.3 | 6.0 | 5.0 | 8.2 | 5.2 | 6.5 | 6.7 | 10.8 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS FUEL OIL | NA | NA | NA | NA | NA | 148.9 | 176.7 | 140.0 | 121.7 | 152.6 |
| CEMENT PLANTS | .0 | 1.3 | NA | 4.7 | 7.4 | 13.6 | 6.1 | 8.3 | 14.8 | 16.6 |
| WILD FIRES | .2 | .2 | .2 | .2 | .2 | .2 | .3 | .2 | .3 | .8 |
| MISCELLANEOUS | 55.5 | 63.2 | 71.7 | 76.5 | 79.9 | 99.1 | 114.1 | 105.2 | 95.0 | 139.4 |

TABLE 4. SO2 EMISSIONS (1000 TONS) 1950-1980 CALIFORNIA

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL BOILERS | 19.6 | 18.3 | .3 | 7.3 | .1 | 3.2 | 12.5 | 15.5 |
| COMMERCIAL-RESIDENTIAL | .2 | .1 | .1 | .1 | 1.4 | .0 | .0 | .0 |
| ANTHRACITE COAL | | | | | | | | |
| ALL USES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDUAL OIL | | | | | | | | |
| ELECTRIC UTILITIES | 26.3 | 46.7 | 55.8 | 39.3 | 40.4 | 112.3 | 77.9 | 84.1 |
| INDUSTRIAL | 100.7 | 107.6 | 78.8 | 80.3 | 101.3 | 53.5 | 47.6 | 58.7 |
| COMMERCIAL | 108.5 | 91.2 | 27.5 | 9.1 | 50.1 | 19.0 | 14.8 | 34.1 |
| DISTILLATE OIL | | | | | | | | |
| ELECTRIC UTILITIES | .1 | .0 | .2 | .1 | .1 | 1.6 | 2.2 | .7 |
| INDUSTRIAL | 2.0 | 3.4 | 5.4 | 4.5 | 3.7 | 4.2 | 6.0 | 3.1 |
| COMMERCIAL-RESIDENTIAL | 11.3 | 14.4 | 5.2 | 1.7 | 3.3 | 6.1 | 7.5 | 6.6 |
| NATURAL GAS | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .1 | .1 | .2 | .2 | .1 | .1 | .2 |
| INDUSTRIAL | .1 | .2 | .1 | .2 | .2 | .2 | .1 | .1 |
| PIPELINES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| COMMERCIAL-RESIDENTIAL | .1 | .0 | .1 | .2 | .2 | .3 | .2 | .2 |
| WOOD | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | .1 | .2 | .2 | .2 | .3 | .3 | .4 | .4 |
| COMMERCIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDENTIAL | .5 | .4 | .3 | .3 | .3 | .4 | .5 | .6 |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE | 7.7 | 9.3 | 11.6 | 15.1 | 18.8 | 21.0 | 25.8 | 25.0 |
| DIESEL | 3.2 | 2.8 | 3.9 | 6.2 | 12.4 | 13.0 | 18.6 | 19.7 |
| OTHER | | | | | | | | |
| RAILROADS-COAL | 29.9 | 9.7 | 2.0 | 1.0 | .3 | .0 | .0 | .0 |
| -OIL | 18.7 | 13.2 | 7.1 | 10.0 | 12.1 | 7.9 | 7.1 | 8.7 |
| COKE PLANTS | 3.7 | 5.9 | 2.3 | 3.7 | 3.8 | 3.3 | 2.7 | 3.2 |
| SMELTERS-COPPER | .0 | .4 | 1.2 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | 15.4 | 6.4 | 3.0 | 19.3 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS-DISTILLATE | .3 | .3 | .4 | .4 | .4 | .2 | .7 | .4 |
| -RESIDUAL | 25.7 | 31.6 | 35.9 | 24.5 | 28.9 | 26.5 | 66.9 | 88.6 |
| OFF HIGHWAY DIESEL | 1.5 | 2.2 | 2.8 | 5.0 | 1.8 | 2.4 | 2.7 | 1.8 |
| CEMENT PLANT | 27.3 | 36.8 | 41.3 | 46.2 | 51.6 | 39.3 | 50.5 | 47.8 |
| WILD FIRES | .7 | .5 | .4 | .2 | .6 | .3 | .2 | .5 |
| MISCELLANEOUS | 189.1 | 180.1 | 174.7 | 211.3 | 227.8 | 183.4 | 187.3 | 174.1 |

TABLE 3. SO2 EMISSIONS (1000 TONS) 1900-1945 COLORADO

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | | | |
| ELECTRIC UTILITIES | 1.6 | 2.6 | 3.6 | 4.8 | 5.3 | 5.3 | 4.5 | 2.9 | 4.1 | 5.3 |
| INDUSTRIAL BOILERS | 14.8 | 19.9 | 24.3 | 28.3 | 26.9 | 23.7 | 17.9 | 13.6 | 14.2 | 15.1 |
| COMMERCIAL-RESIDENTIAL | 9.0 | 12.7 | 16.3 | 21.1 | 21.9 | 25.0 | 25.4 | 18.4 | 16.9 | 20.3 |
| ANTHRACITE COAL | | | | | | | | | | |
| ALL USES | .0 | .0 | .0 | .0 | .0 | .0 | NA | NA | NA | NA |
| RESIDUAL OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .2 | .1 | .1 | .2 | .2 |
| INDUSTRIAL | NA | NA | NA | NA | NA | 1.2 | 1.2 | 1.1 | 1.5 | 3.8 |
| COMMERCIAL | NA | NA | NA | NA | NA | .0 | .1 | .1 | .3 | .0 |
| DISTILLATE OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .1 |
| INDUSTRIAL | NA | NA | NA | NA | NA | .0 | .0 | .0 | .1 | .1 |
| COMMERCIAL-RESIDENTIAL | NA | NA | NA | NA | NA | .0 | .0 | .1 | .2 | .3 |
| NATURAL GAS | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | NA | NA | .0 | .0 | .0 |
| INDUSTRIAL | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| WOOD | | | | | | | | | | |
| ALL USES | .1 | .1 | .1 | .1 | .1 | .1 | .1 | .1 | .1 | .1 |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE | .0 | .0 | .0 | .0 | .1 | .2 | .4 | .4 | .5 | .5 |
| DIESEL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL | 8.5 | 11.9 | 14.4 | 15.4 | 16.5 | 13.3 | 11.0 | 8.4 | 8.8 | 12.0 |
| -OIL | NA | NA | NA | NA | NA | .2 | .2 | .2 | .4 | 1.2 |
| COKE PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| SMELTERS-COPPER | 7.8 | 9.8 | 9.9 | 7.4 | 4.0 | 3.1 | 11.8 | 15.1 | 28.7 | 3.1 |
| -LEAD | 24.4 | 16.8 | 11.5 | 9.6 | 5.3 | 9.4 | 6.6 | 2.2 | 3.4 | 5.1 |
| -ZINC | .0 | 4.0 | 4.8 | 5.2 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS FUEL OIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CEMENT PLANTS | .0 | .9 | NA | NA | NA | NA | NA | NA | NA | NA |
| WILD FIRES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| MISCELLANEOUS | 7.1 | 8.3 | 9.7 | 10.0 | 10.2 | 11.6 | 12.7 | 12.0 | 11.3 | 13.9 |

TABLE 4. SO2 EMISSIONS (1000 TONS) 1950-1980 COLORADO

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | |
| ELECTRIC UTILITIES | 3.3 | 5.1 | 21.4 | 38.3 | 35.9 | 51.8 | 79.2 | 92.9 |
| INDUSTRIAL BOILERS | 4.9 | 4.6 | 10.8 | 8.7 | 6.7 | 9.8 | 8.8 | 13.3 |
| COMMERCIAL-RESIDENTIAL | 9.9 | 6.2 | 4.6 | 5.8 | 2.9 | .2 | .7 | 1.2 |
| ANTHRACITE COAL | | | | | | | | |
| ALL USES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDUAL OIL | | | | | | | | |
| ELECTRIC UTILITIES | .6 | .3 | .2 | .1 | 1.2 | 4.0 | 1.0 | .3 |
| INDUSTRIAL | 4.1 | 5.2 | 8.0 | 4.1 | 5.2 | 5.0 | 6.6 | 8.5 |
| COMMERCIAL | .1 | .3 | 2.6 | 3.4 | 2.5 | 5.2 | 10.5 | .0 |
| DISTILLATE OIL | | | | | | | | |
| ELECTRIC UTILITIES | .1 | .0 | .1 | .0 | .0 | .3 | .3 | .1 |
| INDUSTRIAL | .1 | .2 | .4 | .2 | .3 | .6 | .8 | 1.1 |
| COMMERCIAL-RESIDENTIAL | .5 | 1.1 | 1.4 | 1.4 | 1.6 | 2.2 | 2.0 | .5 |
| NATURAL GAS | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| PIPELINES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| COMMERCIAL-RESIDENTIAL | .0 | .0 | .0 | .0 | .0 | .1 | .0 | .0 |
| WOOD | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| COMMERCIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDENTIAL | .1 | .1 | .1 | .0 | .0 | .1 | .1 | .1 |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE | .9 | 1.2 | 1.3 | 1.7 | 2.1 | 2.6 | 3.2 | 3.6 |
| DIESEL | .2 | .3 | .5 | .6 | 1.3 | 1.7 | 2.3 | 2.4 |
| OTHER | | | | | | | | |
| RAILROADS-COAL | 6.5 | 2.1 | .9 | .4 | .1 | .0 | .0 | .0 |
| -OIL | 1.0 | 1.7 | 1.8 | 1.8 | 1.2 | 1.8 | 2.4 | 3.7 |
| COKE PLANTS | 1.5 | 1.5 | 1.6 | 1.9 | 1.8 | 1.9 | 1.3 | 1.5 |
| SMELTERS-COPPER | .0 | .0 | .0 | .3 | .0 | 2.0 | .0 | .0 |
| -LEAD | 8.0 | 4.7 | 5.4 | 34.7 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS-DISTILLATE | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -RESIDUAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| OFF HIGHWAY DIESEL | .1 | .2 | .4 | .8 | .7 | .6 | .6 | .6 |
| CEMENT PLANT | 2.7 | 3.7 | 5.1 | 5.1 | 5.7 | 7.3 | 8.6 | 7.8 |
| WILD FIRES | .1 | .0 | .0 | .0 | .0 | .0 | .0 | .1 |
| MISCELLANEOUS | 16.7 | 15.7 | 14.9 | 17.1 | 17.7 | 13.4 | 13.6 | 12.6 |

TABLE 3. SO2 EMISSIONS (1000 TONS) 1900-1945 CONNECTICUT

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | | | |
| ELECTRIC UTILITIES | 4.8 | 7.9 | 10.8 | 14.5 | 16.9 | 18.6 | 18.0 | 13.5 | 22.3 | 33.7 |
| INDUSTRIAL BOILERS | 37.2 | 49.5 | 59.6 | 68.6 | 69.5 | 70.4 | 56.5 | 43.2 | 45.4 | 48.5 |
| COMMERCIAL-RESIDENTIAL | 5.5 | 7.6 | 9.6 | 12.3 | 12.7 | 14.5 | 15.2 | 11.7 | 11.6 | 15.3 |
| ANTHRACITE COAL | | | | | | | | | | |
| ALL USES | 20.0 | 27.1 | 29.3 | 30.7 | 31.0 | 23.1 | 8.0 | 6.1 | 10.1 | 10.8 |
| RESIDUAL OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | 6.5 | 5.2 | 4.6 | 9.1 | 7.6 |
| INDUSTRIAL | NA | NA | NA | NA | NA | 7.9 | 7.5 | 7.5 | 7.1 | 8.0 |
| COMMERCIAL | NA | NA | NA | NA | NA | .0 | .0 | .0 | 1.1 | 1.7 |
| DISTILLATE OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .2 | .2 | .2 | .1 | .3 |
| INDUSTRIAL | NA | NA | NA | NA | NA | .2 | .2 | .2 | .3 | .4 |
| COMMERCIAL-RESIDENTIAL | NA | NA | NA | NA | NA | 1.0 | 1.8 | 2.8 | 3.8 | 3.8 |
| NATURAL GAS | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| WOOD | | | | | | | | | | |
| ALL USES | .1 | .1 | .1 | .1 | .1 | .1 | .1 | .1 | .1 | .1 |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE | .0 | .0 | .0 | .0 | .1 | .3 | .5 | .6 | .9 | .7 |
| DIESEL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL | 25.8 | 35.7 | 42.5 | 45.0 | 48.6 | 40.3 | 34.6 | 27.1 | 30.3 | 45.1 |
| -OIL | NA | NA | NA | NA | NA | .2 | .1 | .1 | .1 | .5 |
| COKE PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | 4.0 | 4.8 | 5.2 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS FUEL OIL | NA | NA | NA | NA | NA | .2 | .2 | .2 | .9 | .3 |
| CEMENT PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| WILD FIRES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| MISCELLANEOUS | 6.7 | 7.4 | 8.3 | 8.3 | 8.3 | 10.3 | 11.9 | 10.2 | 8.3 | 10.0 |

TABLE 4. SO2 EMISSIONS (1000 TONS) 1950-1980 CONNECTICUT

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | |
| ELECTRIC UTILITIES | 32.5 | 71.5 | 124.5 | 183.8 | 75.3 | .0 | .1 | .0 |
| INDUSTRIAL BOILERS | 13.6 | 12.8 | 11.9 | 12.0 | 1.4 | .2 | .0 | .0 |
| COMMERCIAL-RESIDENTIAL | 4.9 | 3.1 | 2.6 | .3 | .0 | .0 | .0 | .1 |
| ANTHRACITE COAL | | | | | | | | |
| ALL USES | 12.4 | 5.1 | 1.8 | .7 | .2 | .1 | .1 | .2 |
| RESIDUAL OIL | | | | | | | | |
| ELECTRIC UTILITIES | 28.0 | 11.3 | 9.4 | 15.0 | 116.8 | 30.8 | 25.7 | 29.3 |
| INDUSTRIAL | 30.3 | 30.9 | 38.9 | 45.6 | 44.9 | 8.8 | 16.9 | 11.2 |
| COMMERCIAL | 1.2 | .6 | 18.1 | 19.3 | 22.7 | 7.2 | 9.3 | 2.0 |
| DISTILLATE OIL | | | | | | | | |
| ELECTRIC UTILITIES | .4 | .0 | .0 | .0 | 1.0 | 1.2 | .1 | .1 |
| INDUSTRIAL | .6 | .9 | .7 | .7 | .4 | .5 | .7 | 1.8 |
| COMMERCIAL-RESIDENTIAL | 5.1 | 5.0 | 20.9 | 14.7 | 12.9 | 10.8 | 12.5 | 11.1 |
| NATURAL GAS | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| PIPELINES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| COMMERCIAL-RESIDENTIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| WOOD | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| COMMERCIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDENTIAL | .1 | .1 | .1 | .1 | .1 | .1 | .1 | .2 |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE | 1.2 | 1.6 | 1.6 | 2.0 | 2.6 | 2.9 | 3.0 | 3.1 |
| DIESEL | .0 | .1 | .2 | .6 | 1.3 | 1.4 | 1.7 | 1.8 |
| OTHER | | | | | | | | |
| RAILROADS-COAL | 19.4 | 4.0 | .4 | .0 | .0 | .0 | .0 | .0 |
| -OIL | .9 | 1.3 | .8 | .6 | .6 | .4 | .3 | .1 |
| COKE PLANTS | 1.2 | 1.3 | .9 | .4 | .0 | .0 | .0 | .0 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS-DISTILLATE | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -RESIDUAL | .0 | .1 | .0 | .1 | .1 | .7 | .6 | .1 |
| OFF HIGHWAY DIESEL | .0 | .1 | .0 | .1 | .3 | .4 | .3 | .3 |
| CEMENT PLANT | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| WILD FIRES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| MISCELLANEOUS | 12.2 | 9.4 | 7.0 | 7.9 | 7.1 | 2.0 | 1.4 | 1.0 |

TABLE 3. SO2 EMISSIONS (1000 TONS) 1900-1945 DELAWARE

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDUSTRIAL BOILERS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACITE COAL | | | | | | | | | | |
| ALL USES | 2.1 | 2.9 | 3.1 | 3.3 | 3.3 | 2.5 | 2.5 | 1.9 | 3.1 | 4.6 |
| RESIDUAL OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .0 | .0 | .0 | NA | .0 |
| INDUSTRIAL | NA | NA | NA | NA | NA | 6.4 | 6.1 | 6.0 | 5.8 | 5.1 |
| COMMERCIAL | NA | NA | NA | NA | NA | .0 | .0 | .1 | .0 | .1 |
| DISTILLATE OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | NA | NA | NA | NA | NA | .0 | .0 | .0 | .1 | .1 |
| COMMERCIAL-RESIDENTIAL | NA | NA | NA | NA | NA | .0 | .0 | .1 | .1 | .2 |
| NATURAL GAS | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| WOOD | | | | | | | | | | |
| ALL USES | .1 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE | .0 | .0 | .0 | .0 | .0 | .0 | .1 | .1 | .1 | .1 |
| DIESEL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| -OIL | NA | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .0 |
| COKE PLANTS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS FUEL OIL | NA | NA | NA | NA | NA | .1 | .1 | .1 | .1 | .1 |
| CEMENT PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| WILD FIRES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| MISCELLANEOUS | 2.5 | 2.7 | 2.9 | 3.0 | 3.1 | 3.4 | 3.6 | 3.6 | 3.5 | 4.3 |

TABLE 4. SO2 EMISSIONS (1000 TONS) 1950-1980 DELAWARE

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | |
| ELECTRIC UTILITIES | .3 | 14.7 | 30.2 | 43.2 | 38.0 | 13.3 | 15.3 | 34.0 |
| INDUSTRIAL BOILERS | 5.8 | 5.4 | 30.0 | 33.6 | 5.8 | .3 | 4.3 | 8.1 |
| COMMERCIAL-RESIDENTIAL | 1.9 | 1.2 | 1.2 | .8 | .3 | .0 | .0 | .1 |
| ANTHRACITE COAL | | | | | | | | |
| ALL USES | 4.1 | 2.3 | 1.5 | .6 | .3 | .2 | .2 | .1 |
| RESIDUAL OIL | | | | | | | | |
| ELECTRIC UTILITIES | .1 | .1 | .0 | .2 | 6.0 | 20.5 | 20.2 | 20.3 |
| INDUSTRIAL | 8.2 | 11.6 | 15.5 | 19.1 | 15.6 | 8.1 | 8.2 | 8.5 |
| COMMERCIAL | .0 | .1 | 3.3 | 2.4 | 2.8 | 4.1 | 4.0 | 21.3 |
| DISTILLATE OIL | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .3 | .4 | .8 | .2 |
| INDUSTRIAL | .1 | .2 | .2 | .1 | .1 | .5 | .4 | .2 |
| COMMERCIAL-RESIDENTIAL | .7 | .7 | 2.4 | 2.5 | 2.4 | 2.1 | 1.8 | 1.5 |
| NATURAL GAS | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| PIPELINES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| COMMERCIAL-RESIDENTIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| WOOD | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| COMMERCIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDENTIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE | .2 | .3 | .3 | .4 | .5 | .6 | .7 | .7 |
| DIESEL | .0 | .0 | .0 | .1 | .2 | .2 | .4 | .6 |
| OTHER | | | | | | | | |
| RAILROADS-COAL | 3.2 | 1.0 | .2 | .0 | .0 | .0 | .0 | .0 |
| -OIL | .1 | .1 | .1 | .0 | .1 | .1 | .0 | .6 |
| COKE PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS-DISTILLATE | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -RESIDUAL | .5 | .1 | 1.2 | .7 | .7 | 1.1 | 1.0 | .5 |
| OFF HIGHWAY DIESEL | .0 | .0 | .0 | .0 | .1 | .1 | .1 | .1 |
| CEMENT PLANT | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| WILD FIRES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| MISCELLANEOUS | 5.2 | 5.0 | 4.9 | 5.7 | 6.0 | 4.9 | 5.0 | 4.7 |

TABLE 3. SO2 EMISSIONS (1000 TONS) 1900-1945 DISTRICT OF COLUMBIA

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | | | |
| ELECTRIC UTILITIES | 1.4 | 2.4 | 3.3 | 4.4 | 4.9 | 4.8 | 4.2 | 3.0 | 4.6 | 6.6 |
| INDUSTRIAL BOILERS | 9.4 | 11.0 | 11.3 | 10.5 | 10.2 | 11.5 | 9.7 | 7.4 | 7.8 | 8.4 |
| COMMERCIAL-RESIDENTIAL | .4 | .5 | .5 | .6 | .5 | .6 | .8 | .9 | 1.3 | 2.2 |
| ANTHRACITE COAL | | | | | | | | | | |
| ALL USES | 2.0 | 2.8 | 3.0 | 3.1 | 3.1 | 2.4 | 3.5 | 2.6 | 4.4 | 4.2 |
| RESIDUAL OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | 4.5 | 3.6 | 3.2 | 3.1 | 1.2 |
| INDUSTRIAL | NA | NA | NA | NA | NA | .4 | .3 | .3 | .6 | .4 |
| COMMERCIAL | NA | NA | NA | NA | NA | .2 | .3 | .4 | .2 | .1 |
| DISTILLATE OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | NA | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .0 |
| COMMERCIAL-RESIDENTIAL | NA | NA | NA | NA | NA | .0 | .1 | .1 | .2 | .2 |
| NATURAL GAS | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | .0 | .0 | .0 | NA | NA | NA |
| INDUSTRIAL | NA | NA | .0 | .0 | .0 | .0 | .0 | NA | NA | NA |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | .0 | .0 | .0 | .0 | .0 | NA | NA | NA |
| WOOD | | | | | | | | | | |
| ALL USES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE | .0 | .0 | .0 | .0 | .1 | .1 | .2 | .3 | .4 | .3 |
| DIESEL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL | 4.0 | 4.9 | 4.9 | 4.2 | 4.2 | 3.7 | 3.4 | 2.8 | 3.2 | 4.8 |
| -OIL | NA | NA | NA | NA | NA | .0 | .0 | .0 | .1 | .2 |
| COKE PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS FUEL OIL | NA | NA | NA | NA | NA | .0 | .0 | .0 | .1 | .0 |
| CEMENT PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| WILD FIRES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| MISCELLANEOUS | 2.1 | 2.2 | 2.4 | 2.4 | 2.4 | 3.1 | 3.6 | 3.1 | 2.4 | 3.5 |

TABLE 4. SO2 EMISSIONS (1000 TONS) 1950-1980 DISTRICT OF COLUMBIA

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | |
| ELECTRIC UTILITIES | 28.7 | 26.2 | 15.7 | 10.3 | 45.5 | 3.3 | .0 | .0 |
| INDUSTRIAL BOILERS | 2.5 | 2.3 | 11.8 | 4.0 | 8.9 | 4.7 | 1.4 | .4 |
| COMMERCIAL-RESIDENTIAL | 8.7 | 5.5 | 3.5 | 2.7 | 1.0 | .1 | .0 | 1.2 |
| ANTHRACITE COAL | | | | | | | | |
| ALL USES | 2.9 | 1.4 | .4 | .3 | .1 | .1 | .1 | .0 |
| RESIDUAL OIL | | | | | | | | |
| ELECTRIC UTILITIES | .9 | .2 | .2 | .1 | 27.9 | 6.4 | 2.0 | .8 |
| INDUSTRIAL | .8 | 1.5 | .6 | .9 | .3 | .2 | .1 | .1 |
| COMMERCIAL | .1 | .1 | 10.0 | 29.7 | 37.7 | 7.0 | 4.6 | .3 |
| DISTILLATE OIL | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .1 | 1.0 | .1 | 2.7 | 1.1 |
| INDUSTRIAL | .0 | .1 | .0 | .0 | .0 | .0 | .0 | .0 |
| COMMERCIAL-RESIDENTIAL | .3 | .4 | 2.0 | 1.8 | 2.0 | 1.5 | 1.6 | 1.0 |
| NATURAL GAS | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| PIPELINES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| COMMERCIAL-RESIDENTIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| WOOD | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| COMMERCIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDENTIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE | .5 | .5 | .4 | .5 | .5 | .5 | .6 | .5 |
| DIESEL | .1 | .1 | .1 | .3 | .3 | .3 | .3 | .3 |
| OTHER | | | | | | | | |
| RAILROADS-COAL | NA | NA | NA | NA | NA | .0 | .0 | .0 |
| -OIL | .4 | .5 | .1 | .0 | .2 | .2 | .2 | .1 |
| COKE PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS-DISTILLATE | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -RESIDUAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| OFF HIGHWAY DIESEL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| CEMENT PLANT | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| WILD FIRES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| MISCELLANEOUS | 4.9 | 3.4 | 2.1 | 2.1 | 1.8 | .5 | .4 | .3 |

TABLE 3. SO2 EMISSIONS (1000 TONS) 1900-1945 FLORIDA

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | | | |
| ELECTRIC UTILITIES | .5 | .8 | 1.1 | 1.5 | 1.6 | 1.5 | 2.9 | 4.0 | 9.5 | 18.3 |
| INDUSTRIAL BOILERS | .9 | 1.7 | 2.7 | 4.0 | 4.5 | 4.7 | 4.4 | 4.3 | 5.5 | 7.0 |
| COMMERCIAL-RESIDENTIAL | .6 | 1.1 | 1.8 | 3.0 | 3.3 | 3.8 | 5.7 | 6.9 | 9.5 | 16.7 |
| ANTHRACITE COAL | | | | | | | | | | |
| ALL USES | .3 | .3 | .4 | .4 | .4 | .3 | NA | NA | NA | NA |
| RESIDUAL OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | 24.9 | 19.8 | 17.5 | 24.6 | 42.2 |
| INDUSTRIAL | NA | NA | NA | NA | NA | 7.3 | 6.9 | 6.9 | 9.5 | 20.7 |
| COMMERCIAL | NA | NA | NA | NA | NA | .7 | 1.1 | 1.8 | 1.1 | 11.0 |
| DISTILLATE OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .1 | .1 | .1 | .1 | .2 |
| INDUSTRIAL | NA | NA | NA | NA | NA | .1 | .1 | .1 | .1 | .4 |
| COMMERCIAL-RESIDENTIAL | NA | NA | NA | NA | NA | .1 | .2 | .4 | .8 | 1.3 |
| NATURAL GAS | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | .0 | .0 | .0 | NA | NA | .0 |
| INDUSTRIAL | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| WOOD | | | | | | | | | | |
| ALL USES | .3 | .3 | .3 | .3 | .3 | .3 | .2 | .2 | .2 | .2 |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE | .0 | .0 | .0 | .1 | .2 | .5 | .5 | .6 | .9 | .8 |
| DIESEL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL | 9.6 | 19.4 | 31.2 | 42.5 | 52.3 | 45.9 | 41.6 | 34.3 | 39.5 | 59.8 |
| -OIL | NA | NA | NA | NA | NA | 1.4 | 1.3 | 1.1 | 1.2 | 1.8 |
| COKE PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS FUEL OIL | NA | NA | NA | NA | NA | 12.3 | 14.6 | 11.6 | 9.8 | 6.2 |
| CEMENT PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | NA | NA | NA | NA |
| WILD FIRES | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 | 10.8 | 10.2 | 4.0 | 4.7 |
| MISCELLANEOUS | 44.4 | 49.3 | 54.7 | 59.0 | 62.2 | 70.1 | 76.4 | 76.1 | 75.8 | 102.3 |

TABLE 4. SO2 EMISSIONS (1000 TONS) 1950-1980 FLORIDA

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | |
| ELECTRIC UTILITIES | .0 | 9.6 | 47.4 | 99.7 | 144.5 | 199.4 | 192.8 | 296.7 |
| INDUSTRIAL BOILERS | .0 | 5.7 | 7.3 | 4.2 | 3.0 | .4 | 5.5 | 17.3 |
| COMMERCIAL-RESIDENTIAL | 7.4 | 4.7 | 3.4 | 1.7 | .4 | .0 | .0 | .2 |
| ANTHRACITE COAL | | | | | | | | |
| ALL USES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDUAL OIL | | | | | | | | |
| ELECTRIC UTILITIES | 62.9 | 106.3 | 79.6 | 175.6 | 274.9 | 370.2 | 317.6 | 351.4 |
| INDUSTRIAL | 23.8 | 52.7 | 54.3 | 46.9 | 40.0 | 41.7 | 66.2 | 86.3 |
| COMMERCIAL | 2.7 | 11.9 | 4.9 | 1.9 | 10.6 | 6.5 | 14.3 | 10.8 |
| DISTILLATE OIL | | | | | | | | |
| ELECTRIC UTILITIES | .5 | .8 | .5 | .3 | .6 | 4.8 | 3.7 | 2.3 |
| INDUSTRIAL | .6 | .7 | .5 | .9 | .7 | .8 | 1.8 | 1.6 |
| COMMERCIAL-RESIDENTIAL | 2.7 | 4.8 | 4.4 | 3.6 | 3.7 | 3.4 | 3.7 | 2.7 |
| NATURAL GAS | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .1 | .0 | .0 | .0 |
| INDUSTRIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| PIPELINES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| COMMERCIAL-RESIDENTIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| WOOD | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | .1 | .1 | .1 | .1 | .1 | .1 | .2 | .2 |
| COMMERCIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDENTIAL | .2 | .1 | .1 | .1 | .1 | .1 | .2 | .2 |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE | 1.7 | 2.8 | 3.6 | 4.7 | 6.7 | 9.8 | 11.4 | 12.7 |
| DIESEL | .5 | .5 | .4 | 1.0 | 3.0 | 5.2 | 6.4 | 8.5 |
| OTHER | | | | | | | | |
| RAILROADS-COAL | 32.8 | 10.2 | 2.3 | .0 | .0 | .0 | .0 | .0 |
| -OIL | 2.1 | 3.0 | 2.5 | 2.9 | 3.5 | 1.8 | 2.3 | 2.3 |
| COKE PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS-DISTILLATE | .0 | .1 | .1 | .1 | .1 | .1 | .5 | .4 |
| -RESIDUAL | 1.1 | 2.2 | 2.9 | 2.4 | 2.8 | 2.9 | 5.3 | 15.3 |
| OFF HIGHWAY DIESEL | .4 | .6 | .9 | .8 | 1.0 | 1.1 | 1.5 | .7 |
| CEMENT PLANT | 6.1 | 11.9 | 13.8 | 14.5 | 9.9 | 14.1 | 24.2 | 30.5 |
| WILD FIRES | 3.3 | 2.5 | .9 | .2 | .1 | .2 | .1 | .1 |
| MISCELLANEOUS | 130.1 | 135.9 | 142.7 | 165.5 | 180.7 | 160.5 | 166.9 | 156.9 |

TABLE 3. SO2 EMISSIONS (1000 TONS) 1900-1945 GEORGIA

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | | | |
| ELECTRIC UTILITIES | 3.0 | 5.0 | 6.8 | 9.0 | 9.1 | 6.5 | 5.5 | 5.1 | 9.8 | 16.8 |
| INDUSTRIAL BOILERS | 16.7 | 23.0 | 28.9 | 34.6 | 39.4 | 46.6 | 37.6 | 25.8 | 23.6 | 21.0 |
| COMMERCIAL-RESIDENTIAL | 12.1 | 17.5 | 23.1 | 30.7 | 32.3 | 36.9 | 37.6 | 27.4 | 25.3 | 30.8 |
| ANTHRACITE COAL | | | | | | | | | | |
| ALL USES | .5 | .7 | .7 | .8 | .8 | .6 | NA | NA | NA | NA |
| RESIDUAL OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | 4.4 | 3.5 | 3.1 | 3.3 | 3.8 |
| INDUSTRIAL | NA | NA | NA | NA | NA | 3.5 | 3.3 | 3.3 | 4.7 | 7.2 |
| COMMERCIAL | NA | NA | NA | NA | NA | .3 | .6 | .9 | .5 | 1.7 |
| DISTILLATE OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .1 |
| INDUSTRIAL | NA | NA | NA | NA | NA | .0 | .0 | .0 | .1 | .2 |
| COMMERCIAL-RESIDENTIAL | NA | NA | NA | NA | NA | .1 | .2 | .3 | .4 | .8 |
| NATURAL GAS | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | NA | NA | .0 | .0 | .0 |
| INDUSTRIAL | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| WOOD | | | | | | | | | | |
| ALL USES | .8 | .8 | .7 | .7 | .7 | .6 | .6 | .6 | .6 | .5 |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE | .0 | .0 | .0 | .0 | .1 | .3 | .5 | .6 | .9 | .9 |
| DIESEL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL | 30.0 | 43.1 | 53.4 | 59.0 | 67.3 | 59.1 | 53.6 | 44.1 | 50.9 | 77.0 |
| -OIL | NA | NA | NA | NA | NA | .1 | .1 | .1 | .1 | .2 |
| COKE PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS FUEL OIL | NA | NA | NA | NA | NA | 1.3 | 1.6 | 1.2 | 1.3 | 3.9 |
| CEMENT PLANTS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| WILD FIRES | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 3.1 | 1.8 | 2.2 | .4 |
| MISCELLANEOUS | 22.5 | 24.5 | 26.7 | 27.3 | 27.8 | 29.8 | 31.4 | 30.7 | 29.9 | 33.8 |

TABLE 4. SO2 EMISSIONS (1000 TONS) 1950-1980 GEORGIA

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | |
| ELECTRIC UTILITIES | 47.0 | 87.4 | 111.9 | 227.0 | 280.1 | 537.6 | 556.6 | 704.5 |
| INDUSTRIAL BOILERS | .0 | 12.4 | 15.9 | 13.9 | 8.3 | 8.5 | 14.0 | 17.2 |
| COMMERCIAL-RESIDENTIAL | 17.2 | 10.8 | 8.0 | 4.0 | 2.2 | .6 | .1 | .4 |
| ANTHRACITE COAL | | | | | | | | |
| ALL USES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDUAL OIL | | | | | | | | |
| ELECTRIC UTILITIES | 7.6 | 3.7 | .3 | .5 | 13.4 | 24.9 | 32.3 | .7 |
| INDUSTRIAL | 13.1 | 16.8 | 23.1 | 31.8 | 38.2 | 27.2 | 29.2 | 34.2 |
| COMMERCIAL | 1.9 | 4.2 | .4 | 2.8 | 11.0 | 12.9 | 11.6 | .2 |
| DISTILLATE OIL | | | | | | | | |
| ELECTRIC UTILITIES | .2 | .0 | .0 | .0 | .1 | 1.5 | 1.5 | .5 |
| INDUSTRIAL | .4 | .4 | .4 | .6 | .5 | .8 | 1.1 | 1.1 |
| COMMERCIAL-RESIDENTIAL | 2.3 | 3.0 | 1.7 | 1.2 | 1.3 | 1.2 | 1.4 | .8 |
| NATURAL GAS | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| PIPELINES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| COMMERCIAL-RESIDENTIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .1 |
| WOOD | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | .1 | .1 | .1 | .2 | .2 | .2 | .3 | .3 |
| COMMERCIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDENTIAL | .7 | .5 | .4 | .3 | .2 | .2 | .2 | .2 |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE | 1.7 | 2.5 | 2.7 | 3.5 | 4.7 | 6.2 | 7.0 | 6.9 |
| DIESEL | .1 | .1 | .4 | 1.7 | 4.3 | 5.4 | 6.9 | 7.7 |
| OTHER | | | | | | | | |
| RAILROADS-COAL | 42.3 | 13.1 | 2.9 | .0 | .0 | .0 | .0 | .0 |
| -OIL | 1.5 | 2.3 | 2.1 | 2.1 | 2.7 | 2.7 | 2.7 | 3.4 |
| COKE PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS-DISTILLATE | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .1 |
| -RESIDUAL | .6 | 1.4 | 1.8 | .8 | .2 | .5 | .6 | 4.0 |
| OFF HIGHWAY DIESEL | .3 | .3 | .5 | .8 | .9 | .5 | .7 | .3 |
| CEMENT PLANT | 1.7 | 3.2 | 3.7 | 3.9 | 13.7 | 6.4 | 10.8 | 9.4 |
| WILD FIRES | 2.0 | .5 | .1 | .0 | .0 | .0 | .0 | .0 |
| MISCELLANEOUS | 38.0 | 35.2 | 33.1 | 35.2 | 35.4 | 27.0 | 27.6 | 25.7 |

TABLE 3. SO2 EMISSIONS (1000 TONS) 1900-1945 IDAHO

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL BOILERS | 1.8 | 2.6 | 3.4 | 4.2 | 4.0 | 3.2 | 2.6 | 2.3 | 2.8 | 3.4 |
| COMMERCIAL-RESIDENTIAL | 2.1 | 3.2 | 4.4 | 6.1 | 6.5 | 7.4 | 8.4 | 7.4 | 8.3 | 12.4 |
| ANTHRACITE COAL | | | | | | | | | | |
| ALL USES | .0 | .0 | .0 | .0 | .0 | .0 | NA | NA | NA | NA |
| RESIDUAL OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .0 | .0 | .0 | .0 | NA |
| INDUSTRIAL | NA | NA | NA | NA | NA | .5 | .4 | .4 | .4 | 1.2 |
| COMMERCIAL | NA | NA | NA | NA | NA | .1 | .1 | .2 | .1 | .0 |
| DISTILLATE OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .0 | .0 | .0 | NA | .0 |
| INDUSTRIAL | NA | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .1 |
| COMMERCIAL-RESIDENTIAL | NA | NA | NA | NA | NA | .0 | .1 | .1 | .1 | .2 |
| NATURAL GAS | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | NA | NA | .0 | .0 | .0 |
| INDUSTRIAL | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| WOOD | | | | | | | | | | |
| ALL USES | .1 | .1 | .1 | .1 | .1 | .1 | .1 | .1 | .1 | .1 |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE | .0 | .0 | .0 | .0 | .0 | .1 | .1 | .2 | .2 | .2 |
| DIESEL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL | 8.9 | 13.4 | 17.5 | 20.2 | 22.3 | 17.9 | 14.9 | 11.3 | 11.9 | 16.2 |
| -OIL | NA | NA | NA | NA | NA | .4 | .4 | .3 | .4 | .6 |
| COKE PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| SMELTERS-COPPER | .3 | 7.7 | 7.3 | 6.3 | 1.8 | 3.1 | 2.5 | 2.2 | 8.0 | 3.3 |
| -LEAD | 25.4 | 29.5 | 32.8 | 47.8 | 34.9 | 38.5 | 40.1 | 27.4 | 31.9 | 21.5 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | 5.3 | 7.0 | 24.7 | 19.2 |
| VESSELS FUEL OIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CEMENT PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | NA | NA | NA | NA |
| WILD FIRES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .1 |
| MISCELLANEOUS | 3.8 | 4.6 | 5.5 | 5.8 | 6.0 | 6.8 | 7.4 | 7.2 | 6.9 | 8.7 |

TABLE 4. SO2 EMISSIONS (1000 TONS) 1950-1980 IDAHO

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL BOILERS | 5.0 | 4.7 | 4.7 | 9.1 | 2.1 | 5.0 | 4.9 | 5.5 |
| COMMERCIAL-RESIDENTIAL | 8.9 | 5.6 | 5.0 | 3.7 | 2.1 | 1.2 | .7 | 1.3 |
| ANTHRACITE COAL | | | | | | | | |
| ALL USES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDUAL OIL | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | 2.6 | 3.5 | .3 | .7 | .8 | .5 | 2.3 | .6 |
| COMMERCIAL | .2 | 3.7 | .7 | 1.0 | .8 | 2.8 | 2.7 | 2.5 |
| DISTILLATE OIL | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | 2.2 | .4 | .5 | .4 | .4 | .7 | .6 | .5 |
| COMMERCIAL-RESIDENTIAL | .5 | 1.2 | 3.4 | 2.9 | 2.5 | 2.9 | 3.1 | .7 |
| NATURAL GAS | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .1 |
| INDUSTRIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| PIPELINES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| COMMERCIAL-RESIDENTIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| WOOD | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| COMMERCIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDENTIAL | .1 | .1 | .1 | .1 | .0 | .0 | .1 | .1 |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE | .4 | .5 | .5 | .6 | .8 | .9 | 1.2 | 1.1 |
| DIESEL | .3 | .3 | .2 | .5 | .5 | .8 | 1.2 | .9 |
| OTHER | | | | | | | | |
| RAILROADS-COAL | 8.8 | 2.9 | .7 | .3 | .1 | .0 | .0 | .0 |
| -OIL | .4 | .7 | .3 | .4 | .8 | 1.2 | 1.3 | 1.5 |
| COKE PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| SMELTERS-COPPER | .4 | 6.3 | 3.4 | 3.4 | .0 | .0 | .0 | .0 |
| -LEAD | 32.8 | 22.2 | 15.1 | 97.0 | 6.9 | 1.9 | 1.7 | 1.1 |
| -ZINC | 31.6 | 39.0 | 12.5 | 6.3 | 4.2 | .6 | .6 | .4 |
| VESSELS-DISTILLATE | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -RESIDUAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| OFF HIGHWAY DIESEL | .1 | .2 | .4 | .5 | .5 | .5 | .6 | .3 |
| CEMENT PLANT | .4 | .5 | .5 | .7 | .8 | 1.0 | 1.0 | 1.0 |
| WILD FIRES | .0 | .0 | .1 | .0 | .0 | .0 | .0 | .1 |
| MISCELLANEOUS | 10.8 | 10.6 | 10.6 | 11.5 | 12.1 | 10.5 | 10.9 | 10.2 |

TABLE 3. SO2 EMISSIONS (1000 TONS) 1900-1945 ILLINOIS

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | | | |
| ELECTRIC UTILITIES | 74.7 | 123.7 | 169.1 | 225.6 | 287.7 | 373.9 | 373.7 | 261.9 | 403.6 | 570.5 |
| INDUSTRIAL BOILERS | 692.8 | 927.2 | 1122.9 | 1302.5 | 1240.0 | 1107.7 | 884.6 | 737.1 | 845.0 | 988.2 |
| COMMERCIAL-RESIDENTIAL | 280.9 | 392.9 | 501.1 | 644.8 | 669.6 | 763.8 | 854.2 | 732.7 | 808.7 | 1191.7 |
| ANTHRACITE COAL | | | | | | | | | | |
| ALL USES | 33.5 | 45.4 | 49.0 | 51.4 | 51.8 | 38.7 | 3.3 | 2.5 | 4.1 | 8.3 |
| RESIDUAL OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .6 | .4 | .4 | .6 | .6 |
| INDUSTRIAL | NA | NA | NA | NA | NA | 25.5 | 24.3 | 24.1 | 23.3 | 42.8 |
| COMMERCIAL | NA | NA | NA | NA | NA | .3 | .5 | .8 | .7 | 1.1 |
| DISTILLATE OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .1 | .1 | .1 | .1 | .2 |
| INDUSTRIAL | NA | NA | NA | NA | NA | .6 | .6 | .6 | .7 | 1.3 |
| COMMERCIAL-RESIDENTIAL | NA | NA | NA | NA | NA | .2 | .4 | .6 | 1.6 | 2.5 |
| NATURAL GAS | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| WOOD | | | | | | | | | | |
| ALL USES | .4 | .3 | .3 | .3 | .3 | .3 | .3 | .3 | .2 | .2 |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE | .0 | .0 | .0 | .2 | .6 | 1.4 | 2.3 | 2.5 | 3.4 | 2.7 |
| DIESEL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL | 305.1 | 424.7 | 509.4 | 543.0 | 588.7 | 488.1 | 419.7 | 328.4 | 367.4 | 546.6 |
| -OIL | NA | NA | NA | NA | NA | 1.0 | .9 | .8 | .8 | 1.6 |
| COKE PLANTS | .0 | .1 | .1 | .1 | .1 | .1 | .1 | .1 | .1 | .1 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .8 | 1.3 | 1.1 | 2.3 | 1.0 | 3.1 | 2.2 | .9 | 1.5 |
| -ZINC | 11.5 | 28.4 | 54.1 | 95.5 | 35.5 | 60.8 | 57.2 | 38.1 | 67.1 | 72.4 |
| VESSELS FUEL OIL | NA | NA | NA | NA | NA | 1.7 | 2.0 | 1.6 | 1.0 | 1.3 |
| CEMENT PLANTS | .5 | 3.4 | 9.7 | 11.2 | 12.0 | 15.4 | 17.2 | 7.3 | 10.8 | 9.5 |
| WILD FIRES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| MISCELLANEOUS | 59.5 | 64.8 | 70.6 | 73.2 | 75.0 | 86.2 | 95.0 | 89.4 | 83.1 | 100.6 |

TABLE 4. SO2 EMISSIONS (1000 TONS) 1950-1980 ILLINOIS

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | |
| ELECTRIC UTILITIES | 740.8 | 1095.5 | 1161.7 | 1514.1 | 1848.8 | 1752.8 | 1275.2 | 1161.8 |
| INDUSTRIAL BOILERS | 675.7 | 631.6 | 519.7 | 572.7 | 340.7 | 164.4 | 134.5 | 144.1 |
| COMMERCIAL-RESIDENTIAL | 708.9 | 445.8 | 240.7 | 149.0 | 96.1 | 15.3 | 6.7 | 4.9 |
| ANTHRACITE COAL | | | | | | | | |
| ALL USES | 3.1 | 1.7 | 1.4 | 1.9 | 1.7 | .5 | 1.0 | 1.0 |
| RESIDUAL OIL | | | | | | | | |
| ELECTRIC UTILITIES | 4.6 | .5 | .6 | .6 | 20.7 | 23.5 | 26.7 | 28.7 |
| INDUSTRIAL | 54.0 | 60.9 | 61.9 | 42.5 | 55.0 | 54.2 | 55.6 | 66.3 |
| COMMERCIAL | 1.0 | 4.7 | 64.3 | 70.8 | 86.0 | 57.0 | 32.2 | 15.4 |
| DISTILLATE OIL | | | | | | | | |
| ELECTRIC UTILITIES | .4 | .2 | .2 | .1 | 2.4 | 3.0 | 4.1 | .5 |
| INDUSTRIAL | 3.0 | 3.4 | 1.7 | 2.6 | 2.4 | 2.0 | 2.7 | 2.1 |
| COMMERCIAL-RESIDENTIAL | 5.3 | 6.0 | 32.3 | 24.2 | 21.2 | 17.0 | 19.9 | 5.1 |
| NATURAL GAS | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | .0 | .1 | .1 | .1 | .1 | .1 | .1 | .1 |
| PIPELINES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| COMMERCIAL-RESIDENTIAL | .0 | .0 | .1 | .1 | .2 | .2 | .2 | .2 |
| WOOD | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | .0 | .0 | .1 | .1 | .1 | .1 | .1 | .1 |
| COMMERCIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDENTIAL | .3 | .2 | .2 | .1 | .2 | .2 | .3 | .4 |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE | 4.9 | 6.0 | 6.2 | 7.5 | 8.9 | 9.6 | 10.5 | 10.5 |
| DIESEL | .5 | .9 | .9 | 2.9 | 6.8 | 8.8 | 10.8 | 10.4 |
| OTHER | | | | | | | | |
| RAILROADS-COAL | 235.8 | 47.8 | 3.7 | .0 | .0 | .0 | .0 | .0 |
| -OIL | 5.3 | 5.7 | 9.6 | 8.3 | 9.0 | 9.7 | 7.7 | 8.7 |
| COKE PLANTS | 20.0 | 16.8 | 5.1 | 6.3 | 7.4 | 4.6 | 4.7 | 4.6 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | 1.0 | 1.9 | 1.4 | 9.0 | .0 | .0 | .0 | .0 |
| -ZINC | 63.5 | 70.7 | 41.9 | 21.0 | 13.9 | .4 | .4 | .3 |
| VESSELS-DISTILLATE | .1 | .1 | .0 | .1 | .1 | .1 | .1 | .0 |
| -RESIDUAL | .3 | .3 | .1 | .0 | .1 | .0 | .0 | .0 |
| OFF HIGHWAY DIESEL | .1 | .3 | .9 | 1.1 | .8 | .7 | .6 | .8 |
| CEMENT PLANT | 17.2 | 19.1 | 17.5 | 17.4 | 13.9 | 13.4 | 19.7 | 16.4 |
| WILD FIRES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| MISCELLANEOUS | 119.7 | 115.8 | 113.3 | 120.0 | 122.9 | 100.4 | 103.5 | 96.8 |

TABLE 3. SO2 EMISSIONS (1000 TONS) 1900-1945 INDIANA

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | | | |
| ELECTRIC UTILITIES | 34.5 | 57.1 | 78.1 | 104.2 | 122.5 | 137.6 | 133.6 | 108.8 | 186.7 | 292.6 |
| INDUSTRIAL BOILERS | 187.2 | 274.2 | 362.9 | 459.8 | 547.1 | 665.9 | 578.0 | 449.3 | 480.1 | 522.9 |
| COMMERCIAL-RESIDENTIAL | 55.6 | 85.0 | 118.3 | 165.4 | 177.5 | 202.5 | 223.5 | 187.9 | 203.6 | 294.9 |
| ANTHRACITE COAL | | | | | | | | | | |
| ALL USES | 6.1 | 8.3 | 8.9 | 9.4 | 9.4 | 7.1 | 1.0 | .8 | 1.3 | 1.4 |
| RESIDUAL OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .2 | .1 | .1 | .1 | .2 |
| INDUSTRIAL | NA | NA | NA | NA | NA | 26.1 | 25.0 | 24.7 | 30.9 | 49.2 |
| COMMERCIAL | NA | NA | NA | NA | NA | .1 | .1 | .2 | .3 | .3 |
| DISTILLATE OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .1 | .1 | .1 | .1 | .1 |
| INDUSTRIAL | NA | NA | NA | NA | NA | .2 | .2 | .2 | .3 | .6 |
| COMMERCIAL-RESIDENTIAL | NA | NA | NA | NA | NA | .0 | .1 | .1 | .4 | .6 |
| NATURAL GAS | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| WOOD | | | | | | | | | | |
| ALL USES | .3 | .3 | .3 | .3 | .3 | .2 | .2 | .2 | .2 | .2 |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE | .0 | .0 | .0 | .1 | .3 | .7 | 1.0 | 1.1 | 1.5 | 1.4 |
| DIESEL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL | 139.4 | 212.4 | 278.7 | 325.3 | 365.8 | 303.3 | 260.7 | 204.1 | 228.3 | 339.6 |
| -OIL | NA | NA | NA | NA | NA | .1 | .1 | .1 | .1 | .4 |
| COKE PLANTS | .0 | .1 | .1 | .1 | .1 | .1 | .2 | .1 | .2 | .2 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .5 | 3.2 | 6.9 | 13.2 | 6.8 | 20.4 | 7.5 | 5.6 | 15.4 | 30.4 |
| VESSELS FUEL OIL | NA | NA | NA | NA | NA | 1.4 | 1.7 | 1.3 | .8 | 2.1 |
| CEMENT PLANTS | .1 | 7.0 | 16.3 | 18.3 | 24.3 | NA | NA | NA | NA | NA |
| WILD FIRES | .0 | .0 | .0 | .0 | .0 | .0 | .2 | .0 | .0 | .0 |
| MISCELLANEOUS | 27.1 | 28.7 | 30.4 | 31.3 | 31.9 | 35.2 | 37.8 | 36.4 | 34.8 | 41.1 |

TABLE 4. SO2 EMISSIONS (1000 TONS) 1950-1980 INDIANA

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | |
| ELECTRIC UTILITIES | 372.5 | 582.1 | 893.9 | 1200.9 | 1533.4 | 1598.1 | 1321.3 | 1643.4 |
| INDUSTRIAL BOILERS | 298.6 | 279.0 | 156.2 | 201.2 | 281.3 | 221.6 | 246.7 | 229.2 |
| COMMERCIAL-RESIDENTIAL | 189.9 | 119.5 | 85.6 | 43.7 | 26.2 | 30.5 | 1.6 | 8.0 |
| ANTHRACITE COAL | | | | | | | | |
| ALL USES | .0 | .0 | .7 | 1.3 | 1.1 | .3 | .2 | .0 |
| RESIDUAL OIL | | | | | | | | |
| ELECTRIC UTILITIES | .1 | .1 | .1 | .1 | .2 | .0 | .0 | .0 |
| INDUSTRIAL | 65.3 | 58.8 | 53.2 | 53.7 | 40.4 | 42.9 | 56.2 | 63.6 |
| COMMERCIAL | .6 | .2 | 10.1 | 9.1 | 13.9 | 29.6 | 35.0 | 13.3 |
| DISTILLATE OIL | | | | | | | | |
| ELECTRIC UTILITIES | .4 | .2 | .1 | .1 | .2 | 2.1 | 4.4 | .9 |
| INDUSTRIAL | 2.5 | 4.1 | 3.1 | 2.4 | 1.9 | 1.8 | 2.6 | 1.7 |
| COMMERCIAL-RESIDENTIAL | 3.6 | 4.2 | 20.4 | 16.4 | 15.9 | 12.5 | 13.8 | 6.3 |
| NATURAL GAS | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | .0 | .0 | .0 | .1 | .1 | .1 | .1 | .1 |
| PIPELINES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| COMMERCIAL-RESIDENTIAL | .0 | .0 | .0 | .0 | .1 | .1 | .1 | .1 |
| WOOD | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | .0 | .0 | .0 | .0 | .0 | .0 | .1 | .1 |
| COMMERCIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDENTIAL | .3 | .2 | .2 | .1 | .1 | .1 | .2 | .3 |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE | 2.6 | 3.5 | 3.5 | 4.2 | 5.2 | 5.9 | 6.8 | 9.3 |
| DIESEL | .4 | .5 | .8 | 1.9 | 4.0 | 6.0 | 6.6 | 9.8 |
| OTHER | | | | | | | | |
| RAILROADS-COAL | 146.5 | 29.7 | 2.7 | .0 | .0 | .0 | .0 | .0 |
| -OIL | 1.0 | 3.1 | 3.4 | 3.0 | 3.2 | 3.0 | 3.4 | 4.7 |
| COKE PLANTS | 36.0 | 42.6 | 19.6 | 21.1 | 25.5 | 29.7 | 23.4 | 25.5 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS-DISTILLATE | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -RESIDUAL | .4 | .1 | .2 | .4 | .3 | .4 | .2 | .2 |
| OFF HIGHWAY DIESEL | .1 | .3 | .4 | .6 | 1.2 | .6 | .4 | .4 |
| CEMENT PLANT | 22.5 | 29.5 | 35.3 | 36.5 | 31.4 | 41.3 | 30.7 | 24.4 |
| WILD FIRES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| MISCELLANEOUS | 47.9 | 45.0 | 42.8 | 46.0 | 46.9 | 36.9 | 37.9 | 35.3 |

TABLE 3. SO2 EMISSIONS (1000 TONS) 1900-1945 IOWA

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | | | |
| ELECTRIC UTILITIES | 21.0 | 34.8 | 47.6 | 63.5 | 71.6 | 73.5 | 63.9 | 42.4 | 61.6 | 81.3 |
| INDUSTRIAL BOILERS | 189.9 | 243.6 | 281.2 | 308.9 | 269.7 | 208.1 | 152.3 | 125.9 | 143.2 | 166.4 |
| COMMERCIAL-RESIDENTIAL | 102.8 | 137.8 | 167.6 | 204.7 | 207.9 | 237.2 | 247.8 | 189.6 | 186.2 | 243.5 |
| ANTHRACITE COAL | | | | | | | | | | |
| ALL USES | 3.2 | 4.3 | 4.6 | 4.8 | 4.9 | 3.6 | NA | NA | NA | NA |
| RESIDUAL OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | 1.9 | 1.5 | 1.4 | 1.2 | 2.0 |
| INDUSTRIAL | NA | NA | NA | NA | NA | .7 | .7 | .7 | .2 | .6 |
| COMMERCIAL | NA | NA | NA | NA | NA | .1 | .1 | .2 | .2 | .0 |
| DISTILLATE OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .1 | .1 | .1 | .1 | .3 |
| INDUSTRIAL | NA | NA | NA | NA | NA | .1 | .1 | .1 | .1 | .1 |
| COMMERCIAL-RESIDENTIAL | NA | NA | NA | NA | NA | .1 | .1 | .2 | .7 | 1.5 |
| NATURAL GAS | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | NA | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .0 |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | .0 | .0 | .0 | NA | NA | .0 | .0 | .0 |
| WOOD | | | | | | | | | | |
| ALL USES | .1 | .1 | .1 | .1 | .1 | .1 | .1 | .1 | .1 | .0 |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE | .0 | .0 | .0 | .1 | .3 | .5 | .9 | .9 | 1.2 | 1.0 |
| DIESEL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL | 122.0 | 162.8 | 186.1 | 187.6 | 194.8 | 156.7 | 130.5 | 98.9 | 103.8 | 141.4 |
| -OIL | NA | NA | NA | NA | NA | .1 | .1 | .1 | .3 | 1.0 |
| COKE PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS FUEL OIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | .0 |
| CEMENT PLANTS | .0 | .0 | NA | 12.7 | 13.5 | 12.9 | 19.7 | 9.8 | 12.8 | 8.9 |
| WILD FIRES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| MISCELLANEOUS | 18.7 | 18.9 | 19.1 | 19.4 | 19.5 | 20.8 | 21.8 | 21.1 | 20.3 | 21.2 |

TABLE 4. SO2 EMISSIONS (1000 TONS) 1950-1980 IOWA

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | |
| ELECTRIC UTILITIES | 127.2 | 118.8 | 165.2 | 215.3 | 227.9 | 212.8 | 288.1 | 231.6 |
| INDUSTRIAL BOILERS | 118.6 | 110.8 | 96.4 | 117.7 | 91.9 | 53.5 | 49.5 | 55.2 |
| COMMERCIAL-RESIDENTIAL | 147.5 | 92.8 | 41.8 | 22.5 | 5.3 | 1.6 | 1.9 | 2.8 |
| ANTHRACITE COAL | | | | | | | | |
| ALL USES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .5 |
| RESIDUAL OIL | | | | | | | | |
| ELECTRIC UTILITIES | .8 | .2 | .1 | .2 | .4 | .0 | .0 | .0 |
| INDUSTRIAL | 1.4 | 1.1 | 2.0 | .7 | .4 | .4 | .1 | 1.5 |
| COMMERCIAL | .2 | .3 | 2.0 | 1.6 | .9 | 1.6 | 2.7 | .4 |
| DISTILLATE OIL | | | | | | | | |
| ELECTRIC UTILITIES | .8 | .4 | .3 | .2 | .3 | .6 | 1.1 | .0 |
| INDUSTRIAL | .2 | .2 | .2 | .5 | .3 | .5 | .9 | .6 |
| COMMERCIAL-RESIDENTIAL | 2.1 | 2.3 | 10.1 | 7.0 | 6.1 | 4.0 | 4.0 | 2.6 |
| NATURAL GAS | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| PIPELINES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| COMMERCIAL-RESIDENTIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| WOOD | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| COMMERCIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDENTIAL | .1 | .1 | .0 | .0 | .0 | .0 | .0 | .0 |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE | 1.8 | 2.1 | 2.0 | 2.3 | 2.9 | 3.1 | 3.1 | 3.0 |
| DIESEL | .2 | .2 | .4 | .8 | 2.9 | 3.4 | 4.5 | 4.6 |
| OTHER | | | | | | | | |
| RAILROADS-COAL | 77.1 | 25.0 | 3.8 | 1.9 | .9 | .0 | .0 | .0 |
| -OIL | 2.4 | 3.4 | 1.6 | 1.1 | 1.5 | 2.1 | 1.6 | 1.8 |
| COKE PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS-DISTILLATE | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -RESIDUAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| OFF HIGHWAY DIESEL | .1 | .1 | .5 | .8 | 1.2 | .8 | .8 | .2 |
| CEMENT PLANT | 20.6 | 28.3 | 32.6 | 35.3 | 24.9 | 18.3 | 28.1 | 22.8 |
| WILD FIRES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| MISCELLANEOUS | 22.1 | 20.0 | 18.1 | 16.9 | 15.6 | 11.0 | 11.2 | 10.4 |

TABLE 3. SO2 EMISSIONS (1000 TONS) 1900-1945 KANSAS

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | | | |
| ELECTRIC UTILITIES | 9.1 | 15.1 | 20.6 | 27.5 | 30.9 | 31.6 | 26.6 | 16.7 | 22.5 | 27.1 |
| INDUSTRIAL BOILERS | 47.5 | 59.9 | 67.8 | 72.7 | 68.8 | 65.2 | 49.4 | 35.7 | 35.0 | 34.4 |
| COMMERCIAL-RESIDENTIAL | 41.3 | 54.4 | 64.8 | 77.3 | 77.7 | 88.6 | 87.7 | 60.2 | 51.4 | 55.5 |
| ANTHRACITE COAL | | | | | | | | | | |
| ALL USES | .3 | .3 | .4 | .4 | .4 | .3 | NA | NA | NA | NA |
| RESIDUAL OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | 1.6 | 1.2 | 1.1 | 1.2 | 2.2 |
| INDUSTRIAL | NA | NA | NA | NA | NA | 10.3 | 9.9 | 9.8 | 13.0 | 10.0 |
| COMMERCIAL | NA | NA | NA | NA | NA | .2 | .3 | .5 | .3 | .2 |
| DISTILLATE OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .1 | .1 | .1 | .1 | .2 |
| INDUSTRIAL | NA | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .2 |
| COMMERCIAL-RESIDENTIAL | NA | NA | NA | NA | NA | .1 | .2 | .3 | .4 | .9 |
| NATURAL GAS | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| WOOD | | | | | | | | | | |
| ALL USES | .1 | .1 | .1 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE | .0 | .0 | .0 | .1 | .2 | .5 | .7 | .7 | .8 | .7 |
| DIESEL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL | 129.8 | 170.3 | 190.7 | 187.4 | 192.4 | 154.7 | 128.9 | 97.6 | 102.4 | 139.5 |
| -OIL | NA | NA | NA | NA | NA | 6.6 | 6.2 | 5.1 | 5.0 | 9.9 |
| COKE PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .2 | .4 | .4 | 2.5 | 6.8 | 3.8 | 3.4 | 3.5 | 2.2 |
| -ZINC | 18.8 | 69.6 | 78.3 | 60.6 | 13.4 | 14.3 | 7.6 | .0 | .0 | .0 |
| VESSELS FUEL OIL | NA | NA | NA | NA | NA | NA | NA | NA | .0 | NA |
| CEMENT PLANTS | .1 | NA | 6.2 | 3.9 | 4.8 | 7.2 | 6.6 | 2.6 | 3.8 | 3.3 |
| WILD FIRES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| MISCELLANEOUS | 14.0 | 15.1 | 16.3 | 16.7 | 16.9 | 18.1 | 19.0 | 18.5 | 18.0 | 19.2 |

TABLE 4. SO2 EMISSIONS (1000 TONS) 1950-1980 KANSAS

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | |
| ELECTRIC UTILITIES | 31.3 | 31.3 | 33.9 | 37.3 | 76.7 | 122.0 | 155.3 | 221.7 |
| INDUSTRIAL BOILERS | 17.9 | 16.8 | 17.5 | 10.0 | 6.5 | 3.7 | 4.0 | 13.5 |
| COMMERCIAL-RESIDENTIAL | 12.5 | 7.8 | 8.1 | 1.6 | .0 | .0 | .1 | .2 |
| ANTHRACITE COAL | | | | | | | | |
| ALL USES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDUAL OIL | | | | | | | | |
| ELECTRIC UTILITIES | 2.7 | 3.6 | .9 | 1.2 | 3.4 | 13.7 | 13.1 | .1 |
| INDUSTRIAL | 8.1 | 10.8 | 8.9 | 2.8 | 2.9 | 8.4 | 13.4 | 5.3 |
| COMMERCIAL | .1 | .1 | 1.0 | .7 | 1.4 | 2.8 | 1.6 | .0 |
| DISTILLATE OIL | | | | | | | | |
| ELECTRIC UTILITIES | .3 | .2 | .1 | .1 | .2 | 1.6 | 1.0 | .0 |
| INDUSTRIAL | .3 | .2 | .2 | .1 | .6 | .4 | .5 | .6 |
| COMMERCIAL-RESIDENTIAL | .9 | 1.4 | 1.0 | 1.9 | .7 | .9 | 1.7 | .4 |
| NATURAL GAS | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .1 | .0 | .0 | .0 |
| INDUSTRIAL | .1 | .1 | .0 | .1 | .0 | .0 | .0 | .0 |
| PIPELINES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| COMMERCIAL-RESIDENTIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| WOOD | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| COMMERCIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDENTIAL | .1 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE | 1.3 | 1.6 | 1.6 | 2.0 | 2.1 | 2.4 | 2.7 | 2.8 |
| DIESEL | .2 | .3 | .2 | .7 | 2.0 | 2.4 | 2.7 | 4.0 |
| OTHER | | | | | | | | |
| RAILROADS-COAL | 76.1 | 24.7 | 4.5 | 2.2 | 1.4 | .0 | .0 | .0 |
| -OIL | 6.3 | 5.0 | 3.4 | 3.1 | 2,9 | 2.8 | 4.3 | 5.8 |
| COKE PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | 2.8 | 1.6 | .2 | 1.3 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS-DISTILLATE | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -RESIDUAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| OFF HIGHWAY DIESEL | .1 | .2 | .5 | .6 | 1.0 | 1.2 | 1.7 | .3 |
| CEMENT PLANT | 9.5 | 10.1 | 9.4 | 10.4 | 11.2 | 9.4 | 12.4 | 11.9 |
| WILD FIRES | .0 | .0 | .0 | .1 | .1 | .0 | .2 | .2 |
| MISCELLANEOUS | 20.4 | 19.5 | 18.8 | 18.5 | 18.1 | 14.1 | 14.5 | 13.6 |

TABLE 3. SO2 EMISSIONS (1000 TONS) 1900-1945 KENTUCKY

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | | | |
| ELECTRIC UTILITIES | 9.3 | 15.5 | 21.1 | 28.2 | 32.6 | 35.5 | 40.3 | 37.6 | 73.1 | 126.1 |
| INDUSTRIAL BOILERS | 65.7 | 85.2 | 99.7 | 111.3 | 123.3 | 146.3 | 129.9 | 106.4 | 119.9 | 138.0 |
| COMMERCIAL-RESIDENTIAL | 47.5 | 64.4 | 79.4 | 98.5 | 100.7 | 114.8 | 120.3 | 92.5 | 91.3 | 120.2 |
| ANTHRACITE COAL | | | | | | | | | | |
| ALL USES | .2 | .3 | .3 | .3 | .3 | .2 | NA | NA | NA | NA |
| RESIDUAL OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | NA | NA | NA | NA | .0 |
| INDUSTRIAL | NA | NA | NA | NA | NA | 1.7 | 1.6 | 1.6 | 2.5 | 2.6 |
| COMMERCIAL | NA | NA | NA | NA | NA | .0 | .0 | .1 | .2 | .2 |
| DISTILLATE OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .1 |
| INDUSTRIAL | NA | NA | NA | NA | NA | .1 | .1 | .1 | .1 | .3 |
| COMMERCIAL-RESIDENTIAL | NA | NA | NA | NA | NA | .0 | .1 | .1 | .2 | .4 |
| NATURAL GAS | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDUSTRIAL | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| WOOD | | | | | | | | | | |
| ALL USES | .3 | .3 | .3 | .3 | .2 | .2 | .2 | .2 | .2 | .2 |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE | .0 | .0 | .0 | .0 | .1 | .2 | .4 | .5 | .7 | .6 |
| DIESEL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL | 62.7 | 84.6 | 98.0 | 100.3 | 110.8 | 97.2 | 88.2 | 72.6 | 83.7 | 126.7 |
| -OIL | NA | NA | NA | NA | NA | .1 | .1 | .1 | .2 | .4 |
| COKE PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS FUEL OIL | NA | NA | NA | NA | NA | .8 | .9 | .7 | .6 | 1.0 |
| CEMENT PLANTS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| WILD FIRES | .0 | .0 | .0 | .0 | .0 | .0 | .5 | .0 | .4 | .2 |
| MISCELLANEOUS | 22.0 | 23.2 | 24.4 | 25.1 | 25.5 | 27.6 | 29.3 | 28.5 | 27.6 | 31.3 |

TABLE 4. SO2 EMISSIONS (1000 TONS) 1950-1980 KENTUCKY

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | |
| ELECTRIC UTILITIES | 91.0 | 314.4 | 422.2 | 690.5 | 1138.3 | 1276.7 | 1243.4 | 1052.1 |
| INDUSTRIAL BOILERS | 114.3 | 106.8 | 69.8 | 93.2 | 144.7 | 44.5 | 51.8 | 61.8 |
| COMMERCIAL-RESIDENTIAL | 66.9 | 42.1 | 24.4 | 16.2 | 21.4 | 3.5 | 3.3 | 6.6 |
| ANTHRACITE COAL | | | | | | | | |
| ALL USES | .0 | .0 | .6 | 1.0 | .0 | .0 | .0 | 1.5 |
| RESIDUAL OIL | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .1 | .0 | .0 | .0 |
| INDUSTRIAL | 4.8 | 2.6 | 1.3 | 2.4 | 3.4 | 9.0 | 8.5 | 4.4 |
| COMMERCIAL | .1 | .1 | .1 | .1 | .6 | 3.7 | 2.6 | .8 |
| DISTILLATE OIL | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .1 | .2 | .2 |
| INDUSTRIAL | .4 | .2 | .7 | .4 | .5 | .8 | 1.1 | 1.8 |
| COMMERCIAL-RESIDENTIAL | 1.4 | 1.9 | 2.9 | 3.4 | 3.8 | 2.3 | 3.6 | 4.3 |
| NATURAL GAS | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| PIPELINES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| COMMERCIAL-RESIDENTIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| WOOD | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | .0 | .0 | .0 | .0 | .0 | .1 | .1 | .1 |
| COMMERCIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDENTIAL | .3 | .2 | .2 | .1 | .1 | .1 | .2 | .3 |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE | 1.3 | 1.7 | 1.8 | 2.3 | 3.2 | 3.9 | 4.5 | 4.1 |
| DIESEL | .2 | .2 | .2 | .3 | 1.4 | 2.5 | 3.7 | 4.3 |
| OTHER | | | | | | | | |
| RAILROADS-COAL | 69.6 | 21.6 | 3.3 | .0 | .0 | .0 | .0 | .0 |
| -OIL | .6 | 1.2 | 2.1 | 2.1 | 1.6 | 2.2 | 3.4 | 4.4 |
| COKE PLANTS | 6.0 | 6.5 | 4.0 | 4.6 | 3.2 | 2.7 | 1.7 | 1.5 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS-DISTILLATE | .0 | .1 | .1 | .1 | .1 | .1 | .2 | .5 |
| -RESIDUAL | .1 | .4 | .0 | .0 | .0 | .0 | .0 | .0 |
| OFF HIGHWAY DIESEL | .3 | .3 | .4 | .5 | .4 | .8 | 1.7 | 2.2 |
| CEMENT PLANT | 4.1 | 5.4 | 5.8 | 6.0 | 1.9 | 1.5 | 8.5 | 7.5 |
| WILD FIRES | .2 | .2 | .1 | .0 | .0 | .0 | .0 | .2 |
| MISCELLANEOUS | 35.2 | 33.4 | 32.1 | 32.5 | 32.6 | 26.5 | 27.4 | 25.7 |

TABLE 3. SO2 EMISSIONS (1000 TONS) 1900-1945 LOUISIANA

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | | | |
| ELECTRIC UTILITIES | 3.4 | 5.6 | 7.7 | 10.3 | 13.7 | 19.2 | 18.1 | 10.6 | 13.0 | 13.4 |
| INDUSTRIAL BOILERS | 30.7 | 42.6 | 53.5 | 64.5 | 52.5 | 28.2 | 13.2 | 8.7 | 7.5 | 6.0 |
| COMMERCIAL-RESIDENTIAL | 9.4 | 13.6 | 18.0 | 24.0 | 25.3 | 28.9 | 28.2 | 18.7 | 15.2 | 15.1 |
| ANTHRACITE COAL | | | | | | | | | | |
| ALL USES | .2 | .2 | .2 | .2 | .2 | .2 | NA | NA | NA | NA |
| RESIDUAL OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDUSTRIAL | NA | NA | NA | NA | NA | 7.3 | 7.0 | 7.0 | 4.3 | 5.9 |
| COMMERCIAL | NA | NA | NA | NA | NA | 1.3 | 2.3 | 3.7 | 6.3 | 28.2 |
| DISTILLATE OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .0 | .0 | .0 | .1 | .1 |
| INDUSTRIAL | NA | NA | NA | NA | NA | .1 | .1 | .1 | .1 | .3 |
| COMMERCIAL-RESIDENTIAL | NA | NA | NA | NA | NA | .2 | .3 | .4 | .7 | 2.6 |
| NATURAL GAS | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | NA | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 | .1 |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| WOOD | | | | | | | | | | |
| ALL USES | .4 | .4 | .3 | .3 | .3 | .3 | .3 | .3 | .3 | .2 |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE | .0 | .0 | .0 | .0 | .1 | .3 | .4 | .4 | .6 | .6 |
| DIESEL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL | 54.0 | 77.9 | 97.0 | 107.7 | 116.5 | 93.8 | 78.1 | 59.2 | 62.0 | 84.6 |
| -OIL | NA | NA | NA | NA | NA | 6.0 | 5.6 | 4.6 | 3.9 | 4.7 |
| COKE PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS FUEL OIL | NA | NA | NA | NA | NA | 28.5 | 33.8 | 26.8 | 25.5 | 15.9 |
| CEMENT PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | NA | NA | NA | NA |
| WILD FIRES | .4 | .4 | .4 | .4 | .4 | .4 | 1.1 | .8 | .4 | .4 |
| MISCELLANEOUS | 42.1 | 46.3 | 50.9 | 54.3 | 56.8 | 62.6 | 67.1 | 67.3 | 67.6 | 86.3 |

TABLE 4. SO2 EMISSIONS (1000 TONS) 1950-1980 LOUISIANA

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .3 | 24.2 |
| INDUSTRIAL BOILERS | .0 | 5.8 | 2.9 | 2.8 | .0 | .0 | 7.4 | 4.8 |
| COMMERCIAL-RESIDENTIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .2 |
| ANTHRACITE COAL | | | | | | | | |
| ALL USES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDUAL OIL | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | 12.0 | 57.8 | 14.5 |
| INDUSTRIAL | 5.4 | 5.5 | 3.0 | 2.2 | 6.2 | 32.0 | 57.3 | 77.6 |
| COMMERCIAL | 4.0 | 1.2 | .2 | .0 | 5.8 | 16.1 | 18.0 | 106.3 |
| DISTILLATE OIL | | | | | | | | |
| ELECTRIC UTILITIES | .1 | .1 | .0 | .0 | .0 | .6 | 1.4 | 1.0 |
| INDUSTRIAL | .5 | .9 | 1.6 | 1.2 | .9 | 2.3 | 3.4 | 3.6 |
| COMMERCIAL-RESIDENTIAL | 1.8 | 3.1 | 1.3 | .5 | 1.7 | 2.7 | 2.9 | .7 |
| NATURAL GAS | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .1 | .1 | .1 | .1 | .1 |
| INDUSTRIAL | .1 | .2 | .2 | .2 | .3 | .3 | .3 | .3 |
| PIPELINES | .0 | .0 | .0 | .1 | .1 | .1 | .2 | .1 |
| COMMERCIAL-RESIDENTIAL | .0 | .0 | .0 | .0 | .0 | .1 | .0 | .0 |
| WOOD | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | .1 | .1 | .1 | .1 | .1 | .1 | .1 | .1 |
| COMMERCIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDENTIAL | .2 | .1 | .1 | .1 | .1 | .1 | .1 | .1 |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE | 1.2 | 1.7 | 1.9 | 2.4 | 2.7 | 3.2 | 3.6 | 3.9 |
| DIESEL | .3 | .4 | .9 | .6 | 1.6 | 2.7 | 4.3 | 4.9 |
| OTHER | | | | | | | | |
| RAILROADS-COAL | 46.1 | 15.0 | 2.6 | 1.3 | .8 | .0 | .0 | .0 |
| -OIL | 2.2 | 1.5 | 1.2 | 1.3 | 1.1 | 2.9 | 3.1 | 2.6 |
| COKE PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS-DISTILLATE | .3 | .3 | .5 | .4 | .5 | .9 | .9 | .5 |
| -RESIDUAL | 10.0 | 11.5 | 10.2 | 8.8 | 11.6 | 19.7 | 25.0 | 37.6 |
| OFF HIGHWAY DIESEL | .4 | .9 | 1.1 | .7 | 1.9 | 1.6 | 3.7 | .8 |
| CEMENT PLANT | 1.7 | 3.2 | 4.8 | 5.9 | 5.2 | 5.4 | 6.4 | 6.7 |
| WILD FIRES | .3 | .1 | .1 | .1 | .1 | .0 | .1 | .1 |
| MISCELLANEOUS | 105.5 | 110.7 | 116.4 | 128.3 | 138.3 | 126.1 | 131.9 | 124.4 |

TABLE 3. SO2 EMISSIONS (1000 TONS) 1900-1945 MAINE

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | | | |
| ELECTRIC UTILITIES | 1.9 | 3.2 | 4.4 | 5.9 | 6.6 | 6.8 | 5.8 | 3.6 | 5.0 | 6.0 |
| INDUSTRIAL BOILERS | 10.4 | 15.6 | 21.1 | 27.2 | 27.8 | 26.2 | 20.5 | 15.8 | 16.6 | 17.9 |
| COMMERCIAL-RESIDENTIAL | 1.6 | 2.5 | 3.6 | 5.1 | 5.5 | 6.2 | 6.9 | 5.7 | 6.1 | 8.8 |
| ANTHRACITE COAL | | | | | | | | | | |
| ALL USES | 20.0 | 27.1 | 29.3 | 30.7 | 31.0 | 23.1 | 8.0 | 6.1 | 10.1 | 10.8 |
| RESIDUAL OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | 1.6 | 1.2 | 1.1 | 2.1 | 1.9 |
| INDUSTRIAL | NA | NA | NA | NA | NA | 5.9 | 5.6 | 5.6 | 5.0 | 4.5 |
| COMMERCIAL | NA | NA | NA | NA | NA | .1 | .1 | .2 | .3 | .1 |
| DISTILLATE OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | NA | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .0 |
| COMMERCIAL-RESIDENTIAL | NA | NA | NA | NA | NA | .4 | .6 | 1.0 | 1.6 | 1.4 |
| NATURAL GAS | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| WOOD | | | | | | | | | | |
| ALL USES | .3 | .3 | .3 | .3 | .2 | .2 | .2 | .2 | .2 | .2 |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE | .0 | .0 | .0 | .0 | .1 | .1 | .2 | .3 | .4 | .3 |
| DIESEL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL | 12.1 | 18.9 | 25.3 | 30.1 | 34.1 | 28.3 | 24.3 | 19.0 | 21.3 | 31.7 |
| -OIL | NA | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .1 |
| COKE PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS FUEL OIL | NA | NA | NA | NA | NA | .1 | .1 | .1 | .2 | 1.9 |
| CEMENT PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | NA | NA | NA | NA |
| WILD FIRES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| MISCELLANEOUS | 8.8 | 9.4 | 10.0 | 10.4 | 10.6 | 11.3 | 11.9 | 11.9 | 11.9 | 13.9 |

TABLE 4. SO2 EMISSIONS (1000 TONS) 1950-1980 MAINE

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | |
| ELECTRIC UTILITIES | .1 | .0 | .7 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL BOILERS | .0 | .3 | .6 | 3.9 | .8 | 1.0 | .3 | 2.2 |
| COMMERCIAL-RESIDENTIAL | .1 | .1 | .1 | 1.2 | .1 | .0 | .0 | .3 |
| ANTHRACITE COAL | | | | | | | | |
| ALL USES | 3.7 | 2.3 | 3.4 | 1.5 | .2 | .0 | .1 | .2 |
| RESIDUAL OIL | | | | | | | | |
| ELECTRIC UTILITIES | 8.3 | 11.6 | 15.4 | 31.0 | 33.2 | 20.3 | 8.8 | 14.2 |
| INDUSTRIAL | 9.0 | 8.3 | 6.7 | 4.6 | 11.4 | 19.1 | 25.7 | 20.1 |
| COMMERCIAL | .1 | .6 | 5.4 | 1.5 | 13.3 | 9.9 | 12.2 | 3.2 |
| DISTILLATE OIL | | | | | | | | |
| ELECTRIC UTILITIES | .1 | .1 | .1 | .1 | .1 | .1 | .1 | .1 |
| INDUSTRIAL | .1 | .1 | .1 | .2 | .2 | .2 | .3 | .3 |
| COMMERCIAL-RESIDENTIAL | 3.0 | 3.3 | 6.1 | 6.9 | 7.4 | 6.5 | 7.8 | 5.8 |
| NATURAL GAS | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| PIPELINES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| COMMERCIAL-RESIDENTIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| WOOD | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | .1 | .1 | .1 | .1 | .1 | .1 | .1 | .1 |
| COMMERCIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDENTIAL | .2 | .1 | .1 | .1 | .1 | .1 | .1 | .2 |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE | .5 | .7 | .7 | .8 | 1.0 | 1.1 | 1.3 | 1.2 |
| DIESEL | .0 | .1 | .1 | .2 | .5 | .7 | 1.0 | 1.0 |
| OTHER | | | | | | | | |
| RAILROADS-COAL | 13.7 | 2.8 | .4 | .0 | .0 | .0 | .0 | .0 |
| -OIL | .4 | .7 | .5 | .3 | .5 | .4 | .3 | .2 |
| COKE PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS-DISTILLATE | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -RESIDUAL | .2 | .5 | .6 | .6 | 1.8 | 1.2 | .5 | .3 |
| OFF HIGHWAY DIESEL | .1 | .1 | .1 | .1 | .1 | .1 | .1 | .1 |
| CEMENT PLANT | .7 | 1.1 | 1.1 | 1.6 | 2.2 | 1.6 | 1.7 | 1.6 |
| WILD FIRES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| MISCELLANEOUS | 15.9 | 15.8 | 15.9 | 16.7 | 17.3 | 15.1 | 15.8 | 14.9 |

TABLE 3. SO2 EMISSIONS (1000 TONS) 1900-1945 MARYLAND

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | | | |
| ELECTRIC UTILITIES | 3.3 | 5.4 | 7.4 | 9.8 | 12.4 | 15.7 | 17.1 | 13.8 | 24.2 | 38.7 |
| INDUSTRIAL BOILERS | 42.7 | 55.7 | 65.6 | 73.7 | 67.9 | 58.1 | 47.4 | 42.2 | 51.2 | 63.2 |
| COMMERCIAL-RESIDENTIAL | 5.8 | 7.9 | 9.8 | 12.3 | 12.6 | 14.4 | 17.7 | 17.3 | 21.2 | 34.1 |
| ANTHRACITE COAL | | | | | | | | | | |
| ALL USES | 12.9 | 17.5 | 18.9 | 19.8 | 20.0 | 14.9 | 7.1 | 5.4 | 8.9 | 12.2 |
| RESIDUAL OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | 3.3 | 2.6 | 2.3 | 3.3 | 4.2 |
| INDUSTRIAL | NA | NA | NA | NA | NA | 20.2 | 19.3 | 19.1 | 20.4 | 25.8 |
| COMMERCIAL | NA | NA | NA | NA | NA | .4 | .7 | 1.0 | 2.5 | 3.4 |
| DISTILLATE OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | NA | NA | NA | NA | NA | .1 | .1 | .1 | .1 | .3 |
| COMMERCIAL-RESIDENTIAL | NA | NA | NA | NA | NA | .2 | .3 | .5 | .6 | 1.4 |
| NATURAL GAS | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | .0 | .0 | .0 | NA | NA | NA |
| INDUSTRIAL | NA | NA | .0 | .0 | .0 | .0 | NA | .0 | .0 | .0 |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | .0 | .0 | .0 | NA | NA | .0 | .0 | .0 |
| WOOD | | | | | | | | | | |
| ALL USES | .2 | .2 | .2 | .2 | .2 | .2 | .2 | .2 | .2 | .2 |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE | .0 | .0 | .0 | .0 | .1 | .2 | .4 | .5 | .7 | .6 |
| DIESEL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL | 31.2 | 42.3 | 49.4 | 51.0 | 56.5 | 49.6 | 45.0 | 37.0 | 42.7 | 64.6 |
| -OIL | NA | NA | NA | NA | NA | .1 | .1 | .1 | .1 | .3 |
| COKE PLANTS | .0 | .0 | .0 | .0 | .0 | .1 | .1 | .1 | .1 | .2 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS FUEL OIL | NA | NA | NA | NA | NA | 16.2 | 19.2 | 15.2 | 18.9 | 31.0 |
| CEMENT PLANTS | .0 | .0 | NA | NA | NA | NA | NA | NA | NA | NA |
| WILD FIRES | .0 | .0 | .0 | .0 | .0 | .0 | .1 | .0 | .0 | .0 |
| MISCELLANEOUS | 15.3 | 16.4 | 17.5 | 18.2 | 18.8 | 21.0 | 22.7 | 21.9 | 21.0 | 26.5 |

TABLE 4. SO2 EMISSIONS (1000 TONS) 1950-1980 MARYLAND

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | |
| ELECTRIC UTILITIES | 54.6 | 63.8 | 126.5 | 246.4 | 268.9 | 130.0 | 132.9 | 211.9 |
| INDUSTRIAL BOILERS | 24.1 | 22.6 | 26.8 | 37.0 | 32.6 | 11.2 | 23.7 | 27.4 |
| COMMERCIAL-RESIDENTIAL | 8.1 | 5.1 | 5.2 | 4.8 | 1.8 | .2 | .1 | .7 |
| ANTHRACITE COAL | | | | | | | | |
| ALL USES | 8.5 | 5.7 | 4.2 | 3.9 | 1.5 | .2 | .1 | .2 |
| RESIDUAL OIL | | | | | | | | |
| ELECTRIC UTILITIES | 4.9 | .6 | .9 | 2.5 | 57.3 | 74.4 | 79.6 | 32.7 |
| INDUSTRIAL | 31.7 | 36.6 | 36.3 | 24.8 | 11.8 | 13.3 | 11.0 | 12.8 |
| COMMERCIAL | 1.8 | .7 | 20.4 | 20.7 | 25.8 | 18.3 | 14.4 | 6.4 |
| DISTILLATE OIL | | | | | | | | |
| ELECTRIC UTILITIES | .1 | .2 | .3 | .1 | .9 | 1.1 | .8 | 1.0 |
| INDUSTRIAL | .3 | .7 | .3 | .6 | .8 | .9 | 1.5 | 1.3 |
| COMMERCIAL-RESIDENTIAL | 1.7 | 2.2 | 9.1 | 10.1 | 9.7 | 8.5 | 8.4 | 8.7 |
| NATURAL GAS | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| PIPELINES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| COMMERCIAL-RESIDENTIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| WOOD | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | .0 | .0 | .0 | .1 | .1 | .1 | .1 | .1 |
| COMMERCIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDENTIAL | .2 | .1 | .1 | .1 | .1 | .1 | .2 | .2 |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE | 1.2 | 1.7 | 1.9 | 2.4 | 3.3 | 4.0 | 4.5 | 4.6 |
| DIESEL | .1 | .2 | .4 | 1.2 | 1.3 | 1.8 | 2.2 | 2.8 |
| OTHER | | | | | | | | |
| RAILROADS-COAL | 35.5 | 11.0 | 2.2 | .0 | .0 | .0 | .0 | .0 |
| -OIL | .8 | 1.4 | 1.4 | 2.0 | 2.0 | 1.5 | 1.2 | 1.0 |
| COKE PLANTS | 22.9 | 31.1 | 8.0 | 12.4 | 11.2 | 6.9 | 7.2 | 7.2 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS-DISTILLATE | .1 | .1 | .1 | .0 | .1 | .1 | .1 | .1 |
| -RESIDUAL | 6.6 | 6.4 | 4.8 | 4.1 | 4.7 | 3.0 | 4.2 | 5.9 |
| OFF HIGHWAY DIESEL | .1 | .1 | .1 | .3 | .4 | .5 | .5 | .4 |
| CEMENT PLANT | 3.1 | 3.6 | 5.7 | 6.5 | 7.3 | 6.3 | 7.7 | 7.3 |
| WILD FIRES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| MISCELLANEOUS | 32.6 | 30.6 | 29.2 | 34.0 | 35.8 | 27.9 | 28.5 | 26.4 |

TABLE 3. SO2 EMISSIONS (1000 TONS) 1900-1945 MASSACHUSETTS

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | | | |
| ELECTRIC UTILITIES | 11.9 | 19.7 | 27.0 | 36.0 | 41.4 | 44.4 | 39.2 | 25.7 | 36.6 | 47.4 |
| INDUSTRIAL BOILERS | 108.7 | 137.5 | 156.3 | 168.3 | 162.8 | 160.1 | 123.5 | 89.5 | 88.1 | 87.0 |
| COMMERCIAL-RESIDENTIAL | 14.7 | 19.4 | 23.2 | 27.8 | 28.0 | 32.0 | 35.7 | 30.5 | 33.6 | 49.5 |
| ANTHRACITE COAL | | | | | | | | | | |
| ALL USES | 20.0 | 27.1 | 29.3 | 30.7 | 31.0 | 23.1 | 8.0 | 6.1 | 10.1 | 10.8 |
| RESIDUAL OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | 9.8 | 7.8 | 6.9 | 10.6 | 11.5 |
| INDUSTRIAL | NA | NA | NA | NA | NA | 33.2 | 31.7 | 31.4 | 30.4 | 22.6 |
| COMMERCIAL | NA | NA | NA | NA | NA | .5 | .9 | 1.4 | 2.6 | 4.6 |
| DISTILLATE OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .3 | .3 | .2 | .2 | .3 |
| INDUSTRIAL | NA | NA | NA | NA | NA | .5 | .5 | .5 | .3 | .5 |
| COMMERCIAL-RESIDENTIAL | NA | NA | NA | NA | NA | 3.4 | 5.8 | 9.3 | 12.9 | 11.1 |
| NATURAL GAS | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| WOOD | | | | | | | | | | |
| ALL USES | .4 | .4 | .4 | .3 | .3 | .3 | .3 | .3 | .3 | .3 |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE | .0 | .0 | .0 | .1 | .4 | .9 | 1.3 | 1.4 | 1.7 | 1.3 |
| DIESEL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL | 49.6 | 65.4 | 73.5 | 72.7 | 76.1 | 63.1 | 54.3 | 42.5 | 47.5 | 70.7 |
| -OIL | NA | NA | NA | NA | NA | .0 | .0 | .0 | .1 | .4 |
| COKE PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS FUEL OIL | NA | NA | NA | NA | NA | 10.5 | 12.5 | 9.9 | 8.7 | 20.2 |
| CEMENT PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| WILD FIRES | .0 | .0 | .0 | .0 | .0 | .0 | .1 | .0 | .0 | .0 |
| MISCELLANEOUS | 20.7 | 22.7 | 24.9 | 24.9 | 24.9 | 28.6 | 31.4 | 28.4 | 24.9 | 26.5 |

TABLE 4. SO2 EMISSIONS (1000 TONS) 1950-1980 MASSACHUSETTS

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | |
| ELECTRIC UTILITIES | 29.0 | 54.0 | 71.5 | 118.9 | 22.9 | 4.8 | .0 | 7.1 |
| INDUSTRIAL BOILERS | .0 | 20.6 | 26.2 | 14.4 | 3.9 | 3.6 | 2.1 | 3.3 |
| COMMERCIAL-RESIDENTIAL | 6.7 | 4.2 | 9.5 | 2.5 | .8 | .1 | .0 | 1.1 |
| ANTHRACITE COAL | | | | | | | | |
| ALL USES | 29.9 | 14.6 | 3.7 | 1.5 | .7 | .2 | .2 | 1.0 |
| RESIDUAL OIL | | | | | | | | |
| ELECTRIC UTILITIES | 79.0 | 58.8 | 72.7 | 89.2 | 295.1 | 98.5 | 256.7 | 261.6 |
| INDUSTRIAL | 48.6 | 56.7 | 50.4 | 42.5 | 44.4 | 25.4 | 22.1 | 12.0 |
| COMMERCIAL | 1.8 | 3.0 | 73.5 | 139.2 | 145.9 | 96.5 | 71.3 | 24.3 |
| DISTILLATE OIL | | | | | | | | |
| ELECTRIC UTILITIES | 1.0 | .2 | .2 | .3 | 1.1 | .3 | .4 | .4 |
| INDUSTRIAL | .6 | .8 | .6 | .8 | .6 | .6 | .8 | .9 |
| COMMERCIAL-RESIDENTIAL | 13.3 | 11.4 | 39.8 | 40.5 | 35.0 | 32.6 | 34.3 | 20.5 |
| NATURAL GAS | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| PIPELINES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| COMMERCIAL-RESIDENTIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| WOOD | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | .1 | .1 | .1 | .1 | .2 | .1 | .2 | .2 |
| COMMERCIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDENTIAL | .2 | .1 | .1 | .1 | .1 | .1 | .2 | .2 |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE | 2.3 | 2.8 | 2.9 | 3.5 | 4.2 | 4.6 | 5.6 | 5.7 |
| DIESEL | .2 | .3 | .4 | .8 | 1.8 | 2.0 | 2.7 | 3.2 |
| OTHER | | | | | | | | |
| RAILROADS-COAL | 30.5 | 6.2 | .6 | .0 | .0 | .0 | .0 | .0 |
| -OIL | 1.2 | 1.7 | .9 | .9 | .5 | .6 | .1 | .3 |
| COKE PLANTS | 4.0 | 2.6 | .3 | .0 | .0 | .0 | .0 | .0 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS-DISTILLATE | .1 | .0 | .1 | .1 | .1 | .1 | .1 | .0 |
| -RESIDUAL | 1.4 | 1.2 | .7 | .6 | 2.3 | .8 | 1.0 | 1.2 |
| OFF HIGHWAY DIESEL | .2 | .1 | .1 | .2 | .3 | .1 | .1 | .2 |
| CEMENT PLANT | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| WILD FIRES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| MISCELLANEOUS | 28.6 | 23.2 | 18.5 | 16.5 | 13.3 | 4.4 | 3.7 | 2.9 |

TABLE 3. SO2 EMISSIONS (1000 TONS) 1900-1945 MICHIGAN

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | | | |
| ELECTRIC UTILITIES | 20.1 | 33.3 | 45.5 | 60.8 | 77.8 | 101.6 | 106.0 | 79.5 | 131.0 | 198.1 |
| INDUSTRIAL BOILERS | 104.6 | 162.6 | 226.7 | 300.2 | 357.0 | 425.2 | 336.6 | 328.3 | 382.9 | 455.2 |
| COMMERCIAL-RESIDENTIAL | 27.7 | 45.0 | 65.7 | 95.8 | 104.3 | 119.0 | 137.7 | 124.3 | 143.5 | 219.8 |
| ANTHRACITE COAL | | | | | | | | | | |
| ALL USES | 8.5 | 11.6 | 12.5 | 13.1 | 13.2 | 9.9 | 2.5 | 1.9 | 3.2 | 3.7 |
| RESIDUAL OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | 1.7 | 1.3 | 1.2 | .9 | .9 |
| INDUSTRIAL | NA | NA | NA | NA | NA | 24.4 | 23.3 | 23.1 | 20.1 | 19.5 |
| COMMERCIAL | NA | NA | NA | NA | NA | .1 | .2 | .2 | .5 | 1.0 |
| DISTILLATE OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .0 | .0 | .0 | .2 | .2 |
| INDUSTRIAL | NA | NA | NA | NA | NA | .5 | .5 | .5 | 1.0 | 1.7 |
| COMMERCIAL-RESIDENTIAL | NA | NA | NA | NA | NA | .1 | .2 | .3 | .7 | 1.0 |
| NATURAL GAS | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | NA | NA | .0 | .0 | .0 |
| INDUSTRIAL | NA | NA | .0 | .0 | NA | NA | .0 | .0 | .0 | .0 |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| WOOD | | | | | | | | | | |
| ALL USES | .5 | .4 | .4 | .4 | .4 | .4 | .3 | .3 | .3 | .3 |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE | .0 | .0 | .0 | .1 | .5 | 1.1 | 1.8 | 1.9 | 2.7 | 2.2 |
| DIESEL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL | 49.5 | 80.1 | 110.7 | 135.2 | 154.6 | 128.2 | 110.2 | 86.2 | 96.5 | 143.6 |
| -OIL | NA | NA | NA | NA | NA | .1 | .1 | .1 | .1 | .4 |
| COKE PLANTS | .0 | .0 | .0 | .0 | .0 | .1 | .1 | .0 | .1 | .1 |
| SMELTERS-COPPER | 144.5 | 240.8 | 236.1 | 243.8 | 144.0 | 134.1 | 130.1 | 77.5 | 99.6 | 64.1 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS FUEL OIL | NA | NA | NA | NA | NA | .3 | .3 | .3 | .7 | .5 |
| CEMENT PLANTS | 1.2 | 5.1 | 6.8 | 8.8 | 9.1 | 20.3 | 21.3 | 8.5 | 15.9 | 10.8 |
| WILD FIRES | .6 | .6 | .6 | .6 | .6 | .6 | .2 | .0 | .0 | .0 |
| MISCELLANEOUS | 23.5 | 25.4 | 27.5 | 28.1 | 28.6 | 37.7 | 44.8 | 38.1 | 30.5 | 41.4 |

TABLE 4. SO2 EMISSIONS (1000 TONS) 1950-1980 MICHIGAN

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | |
| ELECTRIC UTILITIES | 315.2 | 438.7 | 482.0 | 754.6 | 1168.5 | 1030.5 | 762.0 | 583.2 |
| INDUSTRIAL BOILERS | 215.6 | 201.6 | 295.7 | 381.7 | 243.6 | 116.4 | 120.1 | 114.0 |
| COMMERCIAL-RESIDENTIAL | 169.5 | 106.6 | 75.1 | 55.4 | 24.7 | 4.2 | 1.7 | 7.2 |
| ANTHRACITE COAL | | | | | | | | |
| ALL USES | 6.0 | 2.2 | 1.0 | 1.7 | 1.4 | 1.0 | .8 | .5 |
| RESIDUAL OIL | | | | | | | | |
| ELECTRIC UTILITIES | .2 | .1 | .0 | .2 | 27.8 | 36.2 | 42.6 | 18.6 |
| INDUSTRIAL | 43.6 | 50.0 | 37.2 | 28.9 | 20.9 | 10.2 | 12.8 | 13.8 |
| COMMERCIAL | .5 | 2.3 | 13.4 | 6.6 | 5.2 | 10.5 | 16.1 | 1.1 |
| DISTILLATE OIL | | | | | | | | |
| ELECTRIC UTILITIES | 1.2 | .5 | .4 | .3 | .9 | 3.9 | 4.7 | 2.0 |
| INDUSTRIAL | 3.5 | 3.7 | 1.3 | 1.3 | 1.5 | 1.4 | 1.9 | 1.1 |
| COMMERCIAL-RESIDENTIAL | 5.3 | 6.6 | 34.5 | 25.5 | 21.4 | 18.9 | 19.1 | 9.4 |
| NATURAL GAS | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | .0 | .0 | .0 | .1 | .1 | .1 | .1 | .1 |
| PIPELINES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| COMMERCIAL-RESIDENTIAL | .0 | .0 | .1 | .1 | .1 | .2 | .1 | .2 |
| WOOD | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | .0 | .0 | .0 | .1 | .1 | .1 | .1 | .1 |
| COMMERCIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDENTIAL | .5 | .3 | .3 | .2 | .2 | .2 | .3 | .5 |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE | 4.0 | 5.3 | 5.2 | 6.6 | 8.5 | 9.2 | 10.7 | 10.0 |
| DIESEL | .3 | .4 | .5 | 1.2 | 3.1 | 4.3 | 6.3 | 5.2 |
| OTHER | | | | | | | | |
| RAILROADS-COAL | 61.9 | 12.6 | 1.2 | .0 | .0 | .0 | .0 | .0 |
| -OIL | 1.2 | 1.9 | 2.2 | 1.9 | 1.9 | 2.9 | 2.4 | 2.5 |
| COKE PLANTS | 13.0 | 16.0 | 8.9 | 10.9 | 9.9 | 5.7 | 5.9 | 6.7 |
| SMELTERS-COPPER | 58.0 | 116.0 | 131.0 | 161.0 | 156.0 | 98.0 | 68.0 | 59.0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS-DISTILLATE | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -RESIDUAL | .3 | 1.3 | .6 | .6 | .5 | .4 | .3 | .2 |
| OFF HIGHWAY DIESEL | .1 | .2 | .5 | 1.2 | 1.3 | 1.1 | 1.1 | .4 |
| CEMENT PLANT | 24.0 | 33.8 | 43.7 | 56.3 | 54.5 | 37.7 | 56.6 | 45.5 |
| WILD FIRES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| MISCELLANEOUS | 54.4 | 46.4 | 39.7 | 44.1 | 43.3 | 27.2 | 26.5 | 23.9 |

TABLE 3. SO2 EMISSIONS (1000 TONS) 1900-1945 MINNESOTA

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | | | |
| ELECTRIC UTILITIES | 7.3 | 12.1 | 16.6 | 22.1 | 23.2 | 19.6 | 16.0 | 11.7 | 18.8 | 27.9 |
| INDUSTRIAL BOILERS | 30.2 | 42.3 | 53.8 | 65.6 | 77.9 | 96.4 | 85.9 | 69.1 | 76.5 | 86.5 |
| COMMERCIAL-RESIDENTIAL | 41.7 | 61.1 | 81.6 | 110.0 | 116.4 | 132.8 | 134.1 | 95.9 | 86.8 | 102.3 |
| ANTHRACITE COAL | | | | | | | | | | |
| ALL USES | 17.0 | 23.0 | 24.9 | 26.1 | 26.3 | 19.6 | .8 | .6 | 1.0 | 1.7 |
| RESIDUAL OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .9 | .7 | .6 | .7 | 1.4 |
| INDUSTRIAL | NA | NA | NA | NA | NA | 1.5 | 1.4 | 1.4 | 1.3 | 1.7 |
| COMMERCIAL | NA | NA | NA | NA | NA | .2 | .3 | .4 | .2 | .2 |
| DISTILLATE OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .0 | .0 | .0 | .1 | .1 |
| INDUSTRIAL | NA | NA | NA | NA | NA | .2 | .2 | .2 | .1 | .2 |
| COMMERCIAL-RESIDENTIAL | NA | NA | NA | NA | NA | .1 | .1 | .2 | .6 | .8 |
| NATURAL GAS | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | NA | NA | .0 | .0 | .0 |
| INDUSTRIAL | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| WOOD | | | | | | | | | | |
| ALL USES | .4 | .3 | .3 | .3 | .3 | .3 | .3 | .3 | .3 | .2 |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE | .0 | .0 | .0 | .1 | .3 | .6 | .8 | .9 | 1.2 | 1.0 |
| DIESEL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL | 89.1 | 129.9 | 163.5 | 183.3 | 199.4 | 160.3 | 133.6 | 101.2 | 106.2 | 144.7 |
| -OIL | NA | NA | NA | NA | NA | .1 | .1 | .1 | .3 | .5 |
| COKE PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS FUEL OIL | NA | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .0 |
| CEMENT PLANTS | .0 | .0 | .0 | .0 | NA | NA | NA | NA | NA | NA |
| WILD FIRES | .3 | .3 | .3 | .3 | .3 | .3 | .2 | .0 | .1 | .0 |
| MISCELLANEOUS | 16.4 | 17.9 | 19.6 | 20.0 | 20.2 | 22.7 | 24.6 | 23.1 | 21.4 | 24.5 |

TABLE 4. SO2 EMISSIONS (1000 TONS) 1950-1980 MINNESOTA

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | |
| ELECTRIC UTILITIES | 52.3 | 64.6 | 102.2 | 162.0 | 262.9 | 192.2 | 135.4 | 121.2 |
| INDUSTRIAL BOILERS | 24.9 | 23.2 | 61.4 | 45.0 | 38.1 | 36.3 | 23.1 | 16.5 |
| COMMERCIAL-RESIDENTIAL | 14.0 | 8.9 | 27.6 | 18.0 | 22.5 | 3.7 | .9 | 2.3 |
| ANTHRACITE COAL | | | | | | | | |
| ALL USES | .7 | 2.0 | .2 | .6 | .5 | .2 | .1 | .0 |
| RESIDUAL OIL | | | | | | | | |
| ELECTRIC UTILITIES | 1.6 | 1.0 | .7 | 2.8 | 8.0 | 8.7 | 6.1 | .9 |
| INDUSTRIAL | 5.5 | 4.4 | 25.0 | 16.9 | 19.1 | 14.2 | 7.0 | 9.5 |
| COMMERCIAL | .1 | .1 | 6.7 | 6.6 | 5.9 | 3.6 | 7.0 | .4 |
| DISTILLATE OIL | | | | | | | | |
| ELECTRIC UTILITIES | .5 | .3 | .3 | .1 | .5 | .8 | .6 | .5 |
| INDUSTRIAL | .4 | 1.4 | .9 | .8 | .7 | .6 | .7 | 1.1 |
| COMMERCIAL-RESIDENTIAL | 1.8 | 2.7 | 12.6 | 12.5 | 13.9 | 10.9 | 12.3 | 6.0 |
| NATURAL GAS | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| PIPELINES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| COMMERCIAL-RESIDENTIAL | .0 | .0 | .0 | .0 | .1 | .1 | .1 | .1 |
| WOOD | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | .0 | .0 | .0 | .0 | .0 | .1 | .1 | .1 |
| COMMERCIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDENTIAL | .4 | .3 | .2 | .2 | .1 | .1 | .2 | .3 |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE | 1.7 | 2.2 | 2.4 | 2.8 | 3.6 | 4.1 | 4.6 | 4.6 |
| DIESEL | .2 | .3 | .4 | .9 | 2.3 | 3.1 | 4.4 | 4.3 |
| OTHER | | | | | | | | |
| RAILROADS-COAL | 78.8 | 25.6 | 4.8 | 2.3 | 1.1 | .0 | .0 | .0 |
| -OIL | 1.4 | 1.7 | 3.0 | 2.4 | 2.5 | 2.5 | 1.8 | 2.2 |
| COKE PLANTS | 3.9 | 4.8 | 1.6 | 2.0 | 1.2 | 2.0 | 1.0 | .0 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS-DISTILLATE | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -RESIDUAL | .1 | .0 | .0 | .0 | .0 | .8 | .7 | 1.2 |
| OFF HIGHWAY DIESEL | .1 | .3 | .6 | .9 | .7 | .7 | .7 | .5 |
| CEMENT PLANT | .9 | 1.1 | 1.2 | 1.4 | .0 | .0 | .0 | .0 |
| WILD FIRES | .0 | .1 | .1 | .0 | .0 | .0 | .0 | .1 |
| MISCELLANEOUS | 27.9 | 25.2 | 22.9 | 23.7 | 23.1 | 16.4 | 16.6 | 15.3 |

TABLE 3. SO2 EMISSIONS (1000 TONS) 1900-1945 MISSISSIPPI

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | | | |
| ELECTRIC UTILITIES | 3.3 | 5.4 | 7.4 | 9.9 | 9.6 | 6.0 | 6.3 | 7.8 | 17.6 | 33.4 |
| INDUSTRIAL BOILERS | 7.9 | 11.4 | 15.0 | 18.8 | 18.0 | 15.1 | 12.4 | 11.3 | 14.0 | 17.5 |
| COMMERCIAL-RESIDENTIAL | 4.0 | 6.1 | 8.4 | 11.6 | 12.4 | 14.2 | 15.2 | 12.2 | 12.6 | 17.5 |
| ANTHRACITE COAL | | | | | | | | | | |
| ALL USES | .0 | .0 | .0 | .0 | .0 | .0 | NA | NA | NA | NA |
| RESIDUAL OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .4 | .3 | .3 | .0 | .2 |
| INDUSTRIAL | NA | NA | NA | NA | NA | .6 | .6 | .6 | .2 | .5 |
| COMMERCIAL | NA | NA | NA | NA | NA | .6 | 1.1 | 1.8 | .3 | 1.1 |
| DISTILLATE OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | NA | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .1 |
| COMMERCIAL-RESIDENTIAL | NA | NA | NA | NA | NA | .1 | .1 | .2 | .3 | .5 |
| NATURAL GAS | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| WOOD | | | | | | | | | | |
| ALL USES | .6 | .5 | .5 | .5 | .5 | .5 | .4 | .4 | .4 | .4 |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE | .0 | .0 | .0 | .0 | .1 | .2 | .3 | .3 | .5 | .5 |
| DIESEL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL | 35.1 | 52.9 | 68.8 | 79.5 | 92.3 | 81.0 | 73.5 | 60.5 | 69.8 | 105.6 |
| -OIL | NA | NA | NA | NA | NA | .1 | .1 | .1 | .2 | .2 |
| COKE PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS FUEL OIL | NA | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .0 |
| CEMENT PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .1 | .3 |
| WILD FIRES | .9 | .9 | .9 | .9 | .9 | .9 | 1.1 | 2.8 | 3.2 | 1.7 |
| MISCELLANEOUS | 29.2 | 31.9 | 34.8 | 36.7 | 38.1 | 41.2 | 43.6 | 43.8 | 44.1 | 53.5 |

TABLE 4. SO2 EMISSIONS (1000 TONS) 1950-1980 MISSISSIPPI

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .1 | .3 | .4 | 36.2 | 50.8 | 73.1 | 101.3 |
| INDUSTRIAL BOILERS | .0 | .0 | .0 | .0 | .0 | .4 | 3.4 | 2.6 |
| COMMERCIAL-RESIDENTIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| ANTHRACITE COAL | | | | | | | | |
| ALL USES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDUAL OIL | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .5 | .8 | .1 | 5.2 | 61.4 | 139.8 | 36.1 |
| INDUSTRIAL | .5 | .3 | 1.1 | .8 | 1.3 | 11.3 | 13.6 | 13.8 |
| COMMERCIAL | .0 | .2 | .0 | .0 | .3 | 2.2 | 2.7 | 21.9 |
| DISTILLATE OIL | | | | | | | | |
| ELECTRIC UTILITIES | .1 | .0 | .0 | .0 | .0 | 2.5 | 1.4 | .3 |
| INDUSTRIAL | .1 | .1 | .3 | .2 | .4 | .5 | 1.0 | .6 |
| COMMERCIAL-RESIDENTIAL | 1.1 | 1.3 | .1 | .2 | .6 | 2.3 | 3.1 | .1 |
| NATURAL GAS | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| PIPELINES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| COMMERCIAL-RESIDENTIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| WOOD | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | .0 | .1 | .1 | .1 | .1 | .1 | .1 | .1 |
| COMMERCIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDENTIAL | .6 | .4 | .4 | .2 | .1 | .1 | .1 | .1 |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE | 1.0 | 1.3 | 1.3 | 1.6 | 1.9 | 2.3 | 2.7 | 2.7 |
| DIESEL | .2 | .2 | .2 | .4 | 1.8 | 2.1 | 3.0 | 3.5 |
| OTHER | | | | | | | | |
| RAILROADS-COAL | 58.0 | 18.0 | 3.8 | .0 | .0 | .0 | .0 | .0 |
| -OIL | .4 | .6 | .6 | .3 | .5 | .3 | .5 | 1.1 |
| COKE PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS-DISTILLATE | .0 | .0 | .0 | .1 | .1 | .2 | .3 | .0 |
| -RESIDUAL | .2 | .0 | .0 | .4 | .0 | 1.6 | 2.9 | 7.2 |
| OFF HIGHWAY DIESEL | .2 | .3 | .7 | .7 | 1.1 | .8 | 1.6 | .5 |
| CEMENT PLANT | NA | 1.5 | 2.2 | 2.7 | 1.4 | 1.4 | 1.7 | 1.8 |
| WILD FIRES | 1.1 | .5 | .1 | .0 | .1 | .0 | .1 | .1 |
| MISCELLANEOUS | 62.9 | 65.5 | 68.4 | 72.9 | 77.5 | 70.7 | 74.1 | 70.0 |

TABLE 3. SO2 EMISSIONS (1000 TONS) 1900-1945 MISSOURI

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | | | |
| ELECTRIC UTILITIES | 21.6 | 35.7 | 48.9 | 65.2 | 76.9 | 86.8 | 80.1 | 54.2 | 80.3 | 108.6 |
| INDUSTRIAL BOILERS | 224.8 | 297.4 | 355.8 | 407.2 | 384.4 | 341.6 | 263.1 | 207.5 | 225.1 | 249.3 |
| COMMERCIAL-RESIDENTIAL | 109.9 | 152.0 | 191.6 | 243.3 | 251.3 | 286.7 | 302.7 | 235.9 | 236.7 | 317.1 |
| ANTHRACITE COAL | | | | | | | | | | |
| ALL USES | 3.8 | 5.1 | 5.5 | 5.8 | 5.8 | 4.4 | NA | NA | NA | NA |
| RESIDUAL OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | 1.3 | 1.0 | .9 | .4 | 1.2 |
| INDUSTRIAL | NA | NA | NA | NA | NA | 4.9 | 4.7 | 4.7 | 4.3 | 8.2 |
| COMMERCIAL | NA | NA | NA | NA | NA | .7 | 1.1 | 1.8 | .9 | 1.6 |
| DISTILLATE OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .1 | .0 | .0 | .2 | .3 |
| INDUSTRIAL | NA | NA | NA | NA | NA | .1 | .1 | .1 | .1 | .3 |
| COMMERCIAL-RESIDENTIAL | NA | NA | NA | NA | NA | .1 | .2 | .4 | .6 | .9 |
| NATURAL GAS | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| WOOD | | | | | | | | | | |
| ALL USES | .5 | .4 | .4 | .4 | .4 | .4 | .3 | .3 | .3 | .3 |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE | .0 | .0 | .0 | .1 | .2 | .5 | 1.0 | 1.2 | 1.6 | 1.3 |
| DIESEL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL | 53.4 | 73.5 | 87.0 | 91.5 | 96.8 | 77.9 | 64.9 | 49.2 | 51.6 | 70.3 |
| -OIL | NA | NA | NA | NA | NA | 2.6 | 2.4 | 2.0 | 2.2 | 2.6 |
| COKE PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .5 | .0 | .0 | .1 | 1.8 | 7.2 |
| -LEAD | .0 | 29.9 | 48.1 | 58.2 | 51.2 | 62.9 | 59.4 | 32.9 | 51.2 | 52.5 |
| -ZINC | 4.4 | 7.2 | 4.1 | 4.0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS FUEL OIL | NA | NA | NA | NA | NA | .0 | .0 | .0 | .7 | .3 |
| CEMENT PLANTS | .0 | 7.9 | 9.1 | 9.4 | 12.2 | 17.0 | 15.9 | 6.9 | 10.1 | 6.5 |
| WILD FIRES | .5 | .5 | .5 | .5 | .5 | .5 | .0 | .0 | .1 | .5 |
| MISCELLANEOUS | 30.2 | 31.6 | 33.1 | 33.9 | 34.4 | 36.7 | 38.5 | 37.8 | 36.9 | 40.5 |

TABLE 4. SO2 EMISSIONS (1000 TONS) 1950-1980 MISSOURI

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | |
| ELECTRIC UTILITIES | 82.7 | 174.8 | 272.2 | 421.6 | 630.0 | 1066.9 | 1040.2 | 1099.4 |
| INDUSTRIAL BOILERS | 119.7 | 111.9 | 104.4 | 91.6 | 80.6 | 77.6 | 73.6 | 67.1 |
| COMMERCIAL-RESIDENTIAL | 144.2 | 90.7 | 52.3 | 13.3 | 5.9 | 5.0 | 2.6 | 3.4 |
| ANTHRACITE COAL | | | | | | | | |
| ALL USES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDUAL OIL | | | | | | | | |
| ELECTRIC UTILITIES | 1.4 | 1.0 | .3 | .0 | 1.0 | 4.7 | 3.5 | .1 |
| INDUSTRIAL | 9.5 | 12.8 | 6.4 | 6.5 | 8.6 | 4.9 | 5.1 | 3.7 |
| COMMERCIAL | .3 | .4 | 8.1 | 9.5 | 11.3 | 5.9 | 8.1 | 3.7 |
| DISTILLATE OIL | | | | | | | | |
| ELECTRIC UTILITIES | .4 | .4 | .2 | .1 | .1 | .4 | 1.9 | .5 |
| INDUSTRIAL | .8 | .6 | .6 | .5 | .6 | .8 | .9 | .5 |
| COMMERCIAL-RESIDENTIAL | 2.1 | 2.6 | 7.8 | 5.0 | 5.6 | 4.7 | 5.2 | 2.0 |
| NATURAL GAS | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .1 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| PIPELINES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| COMMERCIAL-RESIDENTIAL | .0 | .0 | .0 | .1 | .1 | .1 | .1 | .1 |
| WOOD | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | .0 | .0 | .0 | .0 | .0 | .0 | .1 | .1 |
| COMMERCIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDENTIAL | .5 | .4 | .3 | .2 | .2 | .2 | .3 | .4 |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE | 2.6 | 3.2 | 3.2 | 3.8 | 4.1 | 4.8 | 5.5 | 5.5 |
| DIESEL | .3 | .4 | .8 | 1.6 | 3.6 | 4.2 | 5.9 | 6.1 |
| OTHER | | | | | | | | |
| RAILROADS-COAL | 38.3 | 12.4 | 1.9 | .9 | .5 | .0 | .0 | .0 |
| -OIL | 2.6 | 4.6 | 3.8 | 4.1 | 3.1 | 2.5 | 3.0 | 2.1 |
| COKE PLANTS | .6 | .7 | .6 | .5 | .6 | .6 | .4 | .4 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | 40.1 | 37.3 | 33.3 | 213.9 | 152.3 | 40.8 | 37.3 | 24.3 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS-DISTILLATE | .0 | .0 | .0 | .1 | .2 | .1 | .0 | .1 |
| -RESIDUAL | .3 | .2 | .0 | .0 | .0 | .0 | .0 | .0 |
| OFF HIGHWAY DIESEL | .1 | .2 | .7 | .8 | .5 | .5 | .8 | .6 |
| CEMENT PLANT | 15.2 | 19.2 | 18.8 | 24.5 | 40.0 | 38.0 | 41.8 | 32.6 |
| WILD FIRES | .5 | .2 | .3 | .3 | .0 | .1 | .0 | .1 |
| MISCELLANEOUS | 44.3 | 41.9 | 40.0 | 40.6 | 40.3 | 31.8 | 32.8 | 30.7 |

TABLE 3. SO2 EMISSIONS (1000 TONS) 1900-1945 MONTANA

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | | | |
| ELECTRIC UTILITIES | .5 | .8 | 1.1 | 1.4 | 1.4 | .9 | .5 | .3 | .4 | .4 |
| INDUSTRIAL BOILERS | 6.8 | 9.4 | 11.9 | 14.4 | 14.6 | 14.3 | 10.9 | 7.8 | 7.5 | 7.2 |
| COMMERCIAL-RESIDENTIAL | 7.0 | 10.2 | 13.6 | 18.2 | 19.2 | 21.9 | 22.6 | 16.8 | 16.0 | 20.1 |
| ANTHRACITE COAL | | | | | | | | | | |
| ALL USES | .1 | .1 | .1 | .1 | .1 | .1 | NA | NA | NA | NA |
| RESIDUAL OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDUSTRIAL | NA | NA | NA | NA | NA | 1.6 | 1.5 | 1.5 | 1.8 | 1.8 |
| COMMERCIAL | NA | NA | NA | NA | NA | .2 | .3 | .5 | .1 | 4.9 |
| DISTILLATE OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | NA | NA | NA | NA | NA | NA | NA | NA | .0 | .1 |
| COMMERCIAL-RESIDENTIAL | NA | NA | NA | NA | NA | .0 | .1 | .1 | .2 | 1.0 |
| NATURAL GAS | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| WOOD | | | | | | | | | | |
| ALL USES | .1 | .1 | .1 | .1 | .1 | .1 | .1 | .1 | .1 | .1 |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE | .0 | .0 | .0 | .0 | .0 | .1 | .1 | .2 | .3 | .2 |
| DIESEL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL | 17.7 | 25.6 | 32.1 | 35.7 | 38.7 | 31.1 | 25.9 | 19.7 | 20.6 | 28.1 |
| -OIL | NA | NA | NA | NA | NA | 2.1 | 1.9 | 1.6 | 1.8 | 6.9 |
| COKE PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| SMELTERS-COPPER | 268.9 | 329.1 | 301.8 | 273.7 | 166.7 | 263.0 | 180.9 | 165.7 | 280.9 | 81.2 |
| -LEAD | .0 | .7 | .6 | 1.4 | 3.9 | 5.6 | 3.2 | 5.7 | 6.9 | 3.0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | 62.5 | 60.0 | 98.6 | 103.9 |
| VESSELS FUEL OIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CEMENT PLANTS | .0 | .0 | NA | NA | NA | NA | NA | NA | NA | NA |
| WILD FIRES | .3 | .3 | .3 | .3 | .3 | .3 | .1 | .2 | .4 | .2 |
| MISCELLANEOUS | 8.9 | 10.1 | 11.5 | 12.2 | 12.8 | 14.3 | 15.5 | 15.4 | 15.2 | 19.3 |

TABLE 4. SO2 EMISSIONS (1000 TONS) 1950-1980 MONTANA

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | 3.3 | 5.2 | 8.9 | 14.9 | 22.1 | 30.7 |
| INDUSTRIAL BOILERS | .2 | .2 | .2 | 1.6 | .2 | .6 | 2.5 | 2.4 |
| COMMERCIAL-RESIDENTIAL | 7.1 | 4.5 | 4.0 | 3.0 | .1 | .1 | .1 | .2 |
| ANTHRACITE COAL | | | | | | | | |
| ALL USES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDUAL OIL | | | | | | | | |
| ELECTRIC UTILITIES | .1 | .0 | .0 | .0 | .1 | .0 | .0 | .0 |
| INDUSTRIAL | 3.3 | 4.4 | 8.6 | 1.9 | 6.6 | 6.9 | 8.6 | 20.4 |
| COMMERCIAL | .3 | .1 | 2.4 | 3.0 | 1.7 | 2.5 | 5.0 | .0 |
| DISTILLATE OIL | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .1 | .1 | .1 |
| INDUSTRIAL | .0 | .1 | .2 | .2 | .2 | 1.1 | 1.4 | .4 |
| COMMERCIAL-RESIDENTIAL | 1.0 | 1.2 | 1.8 | 1.2 | 1.1 | 1.4 | 1.9 | .7 |
| NATURAL GAS | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| PIPELINES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| COMMERCIAL-RESIDENTIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| WOOD | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| COMMERCIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDENTIAL | .1 | .1 | .1 | .0 | .0 | .0 | .1 | .1 |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE | .4 | .5 | .6 | .7 | .8 | .9 | 1.1 | 1.1 |
| DIESEL | .2 | .2 | .4 | .8 | 1.0 | 1.2 | 1.7 | 1.7 |
| OTHER | | | | | | | | |
| RAILROADS-COAL | 15.3 | 5.0 | 1.2 | .6 | .2 | .0 | .0 | .0 |
| -OIL | 5.5 | 3.5 | 3.0 | 2.3 | 2.0 | 2.4 | 2.3 | 2.9 |
| COKE PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| SMELTERS-COPPER | 109.0 | 176.0 | 202.0 | 247.0 | 238.0 | 90.0 | 63.0 | 54.0 |
| -LEAD | 5.8 | 5.1 | 1.5 | 9.6 | 103.6 | 27.7 | 25.4 | 16.5 |
| -ZINC | 126.7 | 142.7 | 62.7 | 31.4 | 20.8 | .0 | .0 | .0 |
| VESSELS-DISTILLATE | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -RESIDUAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| OFF HIGHWAY DIESEL | .2 | .2 | .5 | .6 | .4 | .4 | .3 | .3 |
| CEMENT PLANT | 1.1 | 1.5 | 1.4 | 2.0 | 2.7 | 3.2 | 3.3 | 3.2 |
| WILD FIRES | .0 | .0 | .2 | .0 | .1 | .0 | .0 | .2 |
| MISCELLANEOUS | 23.6 | 25.0 | 26.4 | 28.6 | 30.7 | 28.2 | 29.6 | 27.9 |

TABLE 3. SO2 EMISSIONS (1000 TONS) 1900-1945 NEBRASKA

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | | | |
| ELECTRIC UTILITIES | 10.9 | 18.1 | 24.7 | 33.0 | 37.3 | 38.6 | 32.3 | 19.7 | 25.5 | 28.9 |
| INDUSTRIAL BOILERS | 47.5 | 59.9 | 67.6 | 72.2 | 62.5 | 48.6 | 33.1 | 23.9 | 23.4 | 23.0 |
| COMMERCIAL-RESIDENTIAL | 32.9 | 43.2 | 51.5 | 61.3 | 61.5 | 70.1 | 69.3 | 47.3 | 40.1 | 42.8 |
| ANTHRACITE COAL | | | | | | | | | | |
| ALL USES | 5.4 | 7.3 | 7.8 | 8.2 | 8.3 | 6.2 | NA | NA | NA | NA |
| RESIDUAL OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | 2.9 | 2.3 | 2.1 | 2.4 | 3.9 |
| INDUSTRIAL | NA | NA | NA | NA | NA | .3 | .3 | .3 | .2 | .5 |
| COMMERCIAL | NA | NA | NA | NA | NA | .3 | .5 | .7 | .5 | .1 |
| DISTILLATE OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .2 | .1 | .1 | .2 | .1 |
| INDUSTRIAL | NA | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .1 |
| COMMERCIAL-RESIDENTIAL | NA | NA | NA | NA | NA | .1 | .1 | .2 | .4 | .7 |
| NATURAL GAS | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | NA | NA | .0 | NA | .0 | .0 | .0 | .0 | .0 | .0 |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| WOOD | | | | | | | | | | |
| ALL USES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE | .0 | .0 | .0 | .0 | .1 | .3 | .5 | .5 | .5 | .5 |
| DIESEL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL | 85.9 | 112.5 | 125.8 | 123.3 | 126.4 | 101.6 | 84.7 | 64.2 | 67.3 | 91.7 |
| -OIL | NA | NA | NA | NA | NA | .3 | .3 | .2 | .3 | .8 |
| COKE PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS FUEL OIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CEMENT PLANTS | .0 | .0 | .0 | NA | NA | NA | NA | NA | NA | NA |
| WILD FIRES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| MISCELLANEOUS | 9.6 | 10.2 | 10.9 | 11.1 | 11.2 | 12.2 | 12.9 | 12.4 | 11.8 | 12.3 |

TABLE 4. SO2 EMISSIONS (1000 TONS) 1950-1980 NEBRASKA

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | |
| ELECTRIC UTILITIES | 9.7 | 9.6 | 20.0 | 37.9 | 31.2 | 25.6 | 44.2 | 49.7 |
| INDUSTRIAL BOILERS | 10.5 | 9.8 | 10.3 | 17.9 | 15.0 | 4.0 | 7.5 | 3.9 |
| COMMERCIAL-RESIDENTIAL | 7.4 | 4.6 | 4.8 | 2.0 | 3.5 | .1 | .1 | .2 |
| ANTHRACITE COAL | | | | | | | | |
| ALL USES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDUAL OIL | | | | | | | | |
| ELECTRIC UTILITIES | 2.6 | .8 | 1.6 | 2.2 | 4.7 | 2.4 | 4.2 | .1 |
| INDUSTRIAL | .6 | .5 | .0 | .3 | 1.4 | .5 | .5 | .2 |
| COMMERCIAL | .0 | .0 | .3 | .3 | .9 | 1.1 | 1.3 | .1 |
| DISTILLATE OIL | | | | | | | | |
| ELECTRIC UTILITIES | .2 | .1 | .1 | .1 | .1 | .1 | .0 | .1 |
| INDUSTRIAL | .1 | .2 | .0 | .1 | .4 | .3 | .4 | .1 |
| COMMERCIAL-RESIDENTIAL | 1.0 | 1.6 | 2.5 | 1.8 | 2.5 | 2.1 | 2.8 | .5 |
| NATURAL GAS | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| PIPELINES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| COMMERCIAL-RESIDENTIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| WOOD | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| COMMERCIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDENTIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE | .9 | 1.2 | 1.1 | 1.3 | 1.5 | 1.8 | 2.0 | 1.8 |
| DIESEL | .1 | .3 | .2 | .4 | 1.2 | 1.9 | 2.3 | 2.5 |
| OTHER | | | | | | | | |
| RAILROADS-COAL | 50.0 | 16.2 | 3.0 | 1.4 | .9 | .0 | .0 | .0 |
| -OIL | 1.0 | 1.5 | 1.6 | .9 | 2.8 | 2.4 | 4.4 | 1.9 |
| COKE PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS-DISTILLATE | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -RESIDUAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| OFF HIGHWAY DIESEL | .1 | .2 | .4 | .4 | .7 | .5 | .7 | .2 |
| CEMENT PLANT | 2.8 | 3.5 | 4.4 | 4.8 | 6.9 | 5.2 | 4.3 | 3.3 |
| WILD FIRES | .0 | .0 | .0 | .4 | .1 | .1 | .1 | .1 |
| MISCELLANEOUS | 12.8 | 12.2 | 11.7 | 11.0 | 10.4 | 7.9 | 8.1 | 7.6 |

TABLE 3. SO2 EMISSIONS (1000 TONS) 1900-1945 NEVADA

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL BOILERS | 1.2 | 1.8 | 2.5 | 3.4 | 4.0 | 4.6 | 3.7 | 2.5 | 2.2 | 1.9 |
| COMMERCIAL-RESIDENTIAL | .6 | .9 | 1.4 | 2.0 | 2.2 | 2.5 | 2.5 | 1.7 | 1.4 | 1.4 |
| ANTHRACITE COAL | | | | | | | | | | |
| ALL USES | .0 | .0 | .0 | .0 | .0 | .0 | NA | NA | NA | NA |
| RESIDUAL OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .1 | .1 | .1 | .1 | .1 |
| INDUSTRIAL | NA | NA | NA | NA | NA | .5 | .5 | .5 | .3 | 2.3 |
| COMMERCIAL | NA | NA | NA | NA | NA | .0 | .1 | .1 | .1 | .2 |
| DISTILLATE OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | NA | NA | NA | NA | NA | .0 | .0 | .0 | .1 | .1 |
| COMMERCIAL-RESIDENTIAL | NA | NA | NA | NA | NA | .0 | .1 | .1 | .1 | .2 |
| NATURAL GAS | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| WOOD | | | | | | | | | | |
| ALL USES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .1 | .1 | .1 |
| DIESEL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL | 4.3 | 7.1 | 9.8 | 12.1 | 13.6 | 11.0 | 9.1 | 6.9 | 7.3 | 9.9 |
| -OIL | NA | NA | NA | NA | NA | 5.4 | 5.1 | 4.2 | 3.5 | 7.4 |
| COKE PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| SMELTERS-COPPER | .4 | .4 | 68.8 | 69.1 | 52.1 | 75.0 | 79.6 | 75.9 | 171.1 | 110.9 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS FUEL OIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CEMENT PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| WILD FIRES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| MISCELLANEOUS | .7 | .9 | 1.1 | 1.1 | 1.2 | 1.2 | 1.3 | 1.3 | 1.3 | 1.7 |

TABLE 4. SO2 EMISSIONS (1000 TONS) 1950-1980 NEVADA

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | 4.6 | 7.1 | 30.5 | 31.0 | 39.1 |
| INDUSTRIAL BOILERS | .9 | .9 | 1.0 | 1.6 | .2 | .7 | .9 | 1.6 |
| COMMERCIAL-RESIDENTIAL | .3 | .2 | .2 | .5 | .7 | .1 | .0 | .1 |
| ANTHRACITE COAL | | | | | | | | |
| ALL USES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDUAL OIL | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .3 | 3.4 | 6.1 | 6.0 |
| INDUSTRIAL | 1.2 | .5 | .1 | .1 | .1 | .1 | .0 | .0 |
| COMMERCIAL | .3 | .1 | 1.0 | .3 | .2 | .3 | .2 | .0 |
| DISTILLATE OIL | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .1 | .0 | .1 |
| INDUSTRIAL | .1 | .2 | .2 | .2 | .1 | .3 | .4 | .2 |
| COMMERCIAL-RESIDENTIAL | .3 | .4 | .8 | .6 | .5 | .5 | .5 | .4 |
| NATURAL GAS | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| PIPELINES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| COMMERCIAL-RESIDENTIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| WOOD | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| COMMERCIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDENTIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE | .2 | .3 | .3 | .5 | .6 | .7 | .9 | 1.0 |
| DIESEL | .1 | .1 | .2 | .3 | .6 | .8 | 1.1 | 1.3 |
| OTHER | | | | | | | | |
| RAILROADS-COAL | 5.4 | 1.8 | .5 | .3 | .0 | .0 | .0 | .0 |
| -OIL | 4.2 | 2.4 | 1.4 | 1.4 | .8 | .3 | .7 | 1.1 |
| COKE PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| SMELTERS-COPPER | 142.0 | 214.8 | 207.5 | 192.9 | 291.2 | 218.0 | 190.0 | 165.0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS-DISTILLATE | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -RESIDUAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| OFF HIGHWAY DIESEL | .1 | .1 | .1 | .2 | .2 | .1 | .3 | .1 |
| CEMENT PLANT | .0 | .0 | .0 | .0 | 1.7 | 2.0 | 2.3 | 2.3 |
| WILD FIRES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .1 |
| MISCELLANEOUS | 2.1 | 1.9 | 1.7 | 2.5 | 2.7 | 1.8 | 1.7 | 1.6 |

TABLE 3. SO2 EMISSIONS (1000 TONS) 1900-1945 NEW HAMPSHIRE

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | | | |
| ELECTRIC UTILITIES | 1.1 | 1.9 | 2.5 | 3.4 | 3.9 | 4.0 | 3.5 | 2.2 | 3.0 | 3.7 |
| INDUSTRIAL BOILERS | 8.9 | 11.8 | 14.2 | 16.4 | 16.1 | 15.4 | 12.2 | 9.5 | 10.2 | 11.1 |
| COMMERCIAL-RESIDENTIAL | 1.4 | 1.9 | 2.4 | 3.0 | 3.2 | 3.6 | 4.0 | 3.4 | 3.7 | 5.4 |
| ANTHRACITE COAL | | | | | | | | | | |
| ALL USES | 20.0 | 27.1 | 29.3 | 30.7 | 31.0 | 23.1 | 8.0 | 6.1 | 10.1 | 10.8 |
| RESIDUAL OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | 1.5 | 1.2 | 1.1 | 2.1 | .7 |
| INDUSTRIAL | NA | NA | NA | NA | NA | 1.1 | 1.1 | 1.1 | 1.5 | 1.1 |
| COMMERCIAL | NA | NA | NA | NA | NA | NA | NA | NA | .0 | .0 |
| DISTILLATE OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .1 | .1 | .1 | .1 | .1 |
| INDUSTRIAL | NA | NA | NA | NA | NA | .1 | .0 | .0 | .0 | .0 |
| COMMERCIAL-RESIDENTIAL | NA | NA | NA | NA | NA | .3 | .4 | .7 | .9 | .8 |
| NATURAL GAS | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| WOOD | | | | | | | | | | |
| ALL USES | .1 | .1 | .1 | .1 | .1 | .1 | .1 | .1 | .1 | .1 |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE | .0 | .0 | .0 | .0 | .0 | .1 | .2 | .2 | .2 | .2 |
| DIESEL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL | 9.8 | 13.5 | 16.1 | 17.1 | 18.5 | 15.3 | 13.1 | 10.3 | 11.5 | 17.2 |
| -OIL | NA | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .0 |
| COKE PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS FUEL OIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CEMENT PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| WILD FIRES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| MISCELLANEOUS | 3.3 | 3.4 | 3.5 | 3.5 | 3.5 | 3.7 | 3.8 | 3.7 | 3.6 | 3.7 |

TABLE 4. SO2 EMISSIONS (1000 TONS) 1950-1980 NEW HAMPSHIRE

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | |
| ELECTRIC UTILITIES | .7 | .5 | 3.8 | 14.7 | 47.8 | 48.1 | 33.3 | 46.4 |
| INDUSTRIAL BOILERS | .0 | 1.8 | 3.1 | 3.5 | 7.2 | .2 | .0 | .4 |
| COMMERCIAL-RESIDENTIAL | .5 | .3 | .5 | .5 | .1 | .0 | .0 | .1 |
| ANTHRACITE COAL | | | | | | | | |
| ALL USES | 4.3 | 2.2 | 1.6 | .7 | .1 | .1 | .0 | .0 |
| RESIDUAL OIL | | | | | | | | |
| ELECTRIC UTILITIES | 6.4 | 10.9 | 11.9 | 10.6 | 19.6 | 14.9 | 17.8 | 26.5 |
| INDUSTRIAL | 3.3 | 3.4 | 2.4 | 3.5 | 8.3 | 6.6 | 5.0 | 4.6 |
| COMMERCIAL | .5 | .2 | .9 | 1.4 | 5.2 | 4.6 | 4.3 | 1.9 |
| DISTILLATE OIL | | | | | | | | |
| ELECTRIC UTILITIES | .1 | .0 | .0 | .0 | .2 | .0 | .0 | .0 |
| INDUSTRIAL | .1 | .1 | .0 | .1 | .1 | .1 | .1 | .3 |
| COMMERCIAL-RESIDENTIAL | 1.6 | 1.4 | 3.8 | 4.6 | 4.9 | 4.4 | 5.2 | 3.3 |
| NATURAL GAS | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| PIPELINES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| COMMERCIAL-RESIDENTIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| WOOD | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| COMMERCIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDENTIAL | .1 | .1 | .0 | .0 | .0 | .0 | .1 | .1 |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE | .3 | .4 | .4 | .5 | .7 | .8 | 1.0 | 1.0 |
| DIESEL | .0 | .0 | .1 | .1 | .2 | .3 | .4 | .5 |
| OTHER | | | | | | | | |
| RAILROADS-COAL | 7.4 | 1.5 | .2 | .0 | .0 | .0 | .0 | .0 |
| -OIL | .1 | .2 | .1 | .0 | .0 | .0 | .0 | .0 |
| COKE PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS-DISTILLATE | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -RESIDUAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .1 |
| OFF HIGHWAY DIESEL | .0 | .0 | .0 | .0 | .1 | .0 | .0 | .1 |
| CEMENT PLANT | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| WILD FIRES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| MISCELLANEOUS | 3.9 | 3.3 | 2.8 | 2.9 | 2.7 | 1.5 | 1.4 | 1.3 |

TABLE 3. SO2 EMISSIONS (1000 TONS) 1900-1945 NEW JERSEY

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | | | |
| ELECTRIC UTILITIES | 12.0 | 19.8 | 27.1 | 36.1 | 46.1 | 60.0 | 59.4 | 40.9 | 61.8 | 85.6 |
| INDUSTRIAL BOILERS | 43.7 | 66.6 | 91.2 | 119.0 | 131.5 | 141.6 | 117.7 | 91.5 | 97.8 | 106.6 |
| COMMERCIAL-RESIDENTIAL | .9 | 1.5 | 2.1 | 3.1 | 3.3 | 3.8 | 4.6 | 4.4 | 5.3 | 8.4 |
| ANTHRACITE COAL | | | | | | | | | | |
| ALL USES | 85.3 | 115.5 | 124.6 | 130.6 | 131.8 | 98.4 | 98.1 | 74.1 | 123.3 | 124.2 |
| RESIDUAL OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | 21.3 | 16.9 | 15.0 | 18.2 | 11.0 |
| INDUSTRIAL | NA | NA | NA | NA | NA | 64.4 | 61.6 | 60.9 | 60.4 | 52.4 |
| COMMERCIAL | NA | NA | NA | NA | NA | .9 | 1.5 | 2.4 | 5.5 | 31.3 |
| DISTILLATE OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .2 | .2 | .1 | .2 | .3 |
| INDUSTRIAL | NA | NA | NA | NA | NA | .7 | .7 | .7 | .9 | 2.3 |
| COMMERCIAL-RESIDENTIAL | NA | NA | NA | NA | NA | .9 | 1.6 | 2.6 | 3.4 | 9.3 |
| NATURAL GAS | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| WOOD | | | | | | | | | | |
| ALL USES | .2 | .2 | .2 | .2 | .2 | .2 | .2 | .2 | .1 | .1 |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE | .0 | .0 | .0 | .1 | .3 | .7 | 1.4 | 1.5 | 2.1 | 1.5 |
| DIESEL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL | 100.9 | 159.8 | 217.2 | 261.4 | 297.2 | 246.4 | 211.8 | 165.8 | 185.5 | 275.9 |
| -OIL | NA | NA | NA | NA | NA | .1 | .1 | .0 | .3 | .5 |
| COKE PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .1 | .7 | .7 | .0 | .0 | 1.3 | 1.5 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS FUEL OIL | NA | NA | NA | NA | NA | 86.1 | 102.2 | 81.0 | 75.3 | 155.5 |
| CEMENT PLANTS | .0 | .0 | .0 | .0 | NA | NA | NA | NA | NA | .0 |
| WILD FIRES | .1 | .1 | .1 | .1 | .1 | .1 | .2 | .1 | .0 | .0 |
| MISCELLANEOUS | 30.7 | 34.7 | 39.2 | 41.0 | 42.3 | 50.6 | 57.1 | 52.8 | 47.9 | 61.5 |

TABLE 4. SO2 EMISSIONS (1000 TONS) 1950-1980 NEW JERSEY

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | |
| ELECTRIC UTILITIES | 80.1 | 125.8 | 166.8 | 319.6 | 164.2 | 86.0 | 62.6 | 88.0 |
| INDUSTRIAL BOILERS | 51.8 | 48.4 | 37.9 | 53.2 | 10.6 | 1.9 | 1.1 | .9 |
| COMMERCIAL-RESIDENTIAL | 9.9 | 6.3 | 2.0 | 1.1 | .1 | .0 | .0 | 1.5 |
| ANTHRACITE COAL | | | | | | | | |
| ALL USES | 82.6 | 52.2 | 24.0 | 17.1 | 6.8 | 1.6 | 1.4 | 1.2 |
| RESIDUAL OIL | | | | | | | | |
| ELECTRIC UTILITIES | 52.0 | 24.3 | 40.3 | 43.3 | 129.7 | 31.0 | 39.2 | 18.7 |
| INDUSTRIAL | 95.5 | 113.4 | 96.6 | 74.8 | 89.0 | 55.8 | 48.3 | 56.8 |
| COMMERCIAL | .4 | 1.0 | 18.5 | 36.5 | 78.2 | 52.6 | 44.9 | 36.8 |
| DISTILLATE OIL | | | | | | | | |
| ELECTRIC UTILITIES | .6 | .0 | .0 | .0 | 1.2 | 1.0 | .7 | .5 |
| INDUSTRIAL | 4.9 | 5.1 | 1.3 | 1.6 | 1.3 | 1.5 | 1.4 | 3.9 |
| COMMERCIAL-RESIDENTIAL | 5.6 | 5.3 | 30.7 | 33.9 | 33.2 | 27.6 | 28.7 | 22.4 |
| NATURAL GAS | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| PIPELINES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| COMMERCIAL-RESIDENTIAL | .2 | .0 | .0 | .0 | .1 | .1 | .0 | .1 |
| WOOD | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | .0 | .0 | .0 | .1 | .1 | .1 | .1 | .1 |
| COMMERCIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDENTIAL | .1 | .1 | .1 | .1 | .1 | .1 | .2 | .2 |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE | 2.9 | 4.1 | 4.1 | 5.0 | 6.4 | 7.7 | 8.2 | 8.1 |
| DIESEL | .5 | .6 | 1.2 | 2.3 | 3.8 | 4.5 | 4.8 | 5.9 |
| OTHER | | | | | | | | |
| RAILROADS-COAL | 119.0 | 24.2 | 3.2 | .0 | .0 | .0 | .0 | .0 |
| -OIL | 1.1 | 2.1 | 1.8 | 1.6 | 1.6 | 1.3 | 1.0 | .3 |
| COKE PLANTS | 7.6 | 5.1 | 1.4 | 1.0 | 1.1 | .0 | .1 | .0 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | 1.4 | 1.2 | 1.0 | 6.4 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS-DISTILLATE | .2 | .2 | .2 | .2 | .3 | .3 | .3 | .3 |
| -RESIDUAL | 8.7 | 11.4 | 6.0 | 5.0 | 8.1 | 4.1 | 9.5 | 16.0 |
| OFF HIGHWAY DIESEL | .1 | .1 | .2 | .4 | .5 | .2 | .3 | .4 |
| CEMENT PLANT | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| WILD FIRES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| MISCELLANEOUS | 76.4 | 74.8 | 74.1 | 81.5 | 85.1 | 69.8 | 71.8 | 67.0 |

TABLE 3. SO2 EMISSIONS (1000 TONS) 1900-1945 NEW MEXICO

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | | | |
| ELECTRIC UTILITIES | .2 | .3 | .5 | .6 | .6 | .5 | .4 | .2 | .3 | .4 |
| INDUSTRIAL BOILERS | 1.1 | 1.8 | 2.6 | 3.6 | 4.7 | 6.0 | 5.0 | 3.5 | 3.2 | 2.8 |
| COMMERCIAL-RESIDENTIAL | .8 | 1.3 | 2.0 | 3.1 | 3.4 | 3.9 | 3.8 | 2.6 | 2.2 | 2.3 |
| ANTHRACITE COAL | | | | | | | | | | |
| ALL USES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDUAL OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .3 | .3 | .2 | .1 | .2 |
| INDUSTRIAL | NA | NA | NA | NA | NA | .8 | .7 | .7 | .7 | .7 |
| COMMERCIAL | NA | NA | NA | NA | NA | .1 | .2 | .3 | .1 | .2 |
| DISTILLATE OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | NA | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .0 |
| COMMERCIAL RESIDENTIAL | NA | NA | NA | NA | NA | .0 | .0 | .0 | .1 | .4 |
| NATURAL GAS | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | .0 | .0 | .0 | NA | .0 | .0 | .0 | .0 |
| WOOD | | | | | | | | | | |
| ALL USES | .1 | .1 | .1 | .1 | .1 | .1 | .1 | .1 | .1 | .1 |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE | .0 | .0 | .0 | .0 | .0 | .0 | .1 | .1 | .2 | .2 |
| DIESEL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL | 6.1 | 10.6 | 15.3 | 19.5 | 22.2 | 17.8 | 14.8 | 11.2 | 11.8 | 16.1 |
| -OIL | NA | NA | NA | NA | NA | .4 | .3 | .3 | .3 | 1.4 |
| COKE PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| SMELTERS-COPPER | 4.1 | 5.6 | 4.0 | 64.1 | 48.9 | 74.3 | 67.5 | 4.8 | 153.4 | 119.3 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS FUEL OIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CEMENT PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| WILD FIRES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| MISCELLANEOUS | 28.2 | 31.4 | 34.9 | 37.8 | 39.8 | 43.5 | 46.4 | 47.6 | 48.9 | 63.8 |

TABLE 4. SO2 EMISSIONS (1000 TONS) 1950-1980 NEW MEXICO

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | |
| ELECTRIC UTILITIES | .7 | .2 | .7 | 54.5 | 91.6 | 82.8 | 99.3 | 112.2 |
| INDUSTRIAL BOILERS | 2.1 | 2.0 | 2.4 | .0 | .1 | .0 | .9 | .1 |
| COMMERCIAL-RESIDENTIAL | 1.2 | .7 | .9 | .2 | .0 | .0 | .0 | .4 |
| ANTHRACITE COAL | | | | | | | | |
| ALL USES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDUAL OIL | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .3 | .1 | .2 | 2.2 | .1 | .3 |
| INDUSTRIAL | .7 | .3 | .1 | .1 | .1 | 3.2 | 4.6 | 4.5 |
| COMMERCIAL | .1 | .2 | .1 | .2 | .0 | 1.3 | .5 | .0 |
| DISTILLATE OIL | | | | | | | | |
| ELECTRIC UTILITIES | .1 | .0 | .0 | .0 | .0 | .3 | .1 | .1 |
| INDUSTRIAL | .1 | .0 | .4 | .1 | .5 | .7 | 1.0 | .6 |
| COMMERCIAL-RESIDENTIAL | .6 | 1.3 | .9 | .5 | .7 | .9 | 1.3 | .8 |
| NATURAL GAS | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | .0 | .1 | .0 | .0 | .0 | .0 | .0 | .0 |
| PIPELINES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| COMMERCIAL-RESIDENTIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| WOOD | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| COMMERCIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDENTIAL | .1 | .1 | .1 | .1 | .1 | .1 | .1 | .1 |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE | .5 | .7 | .9 | 1.0 | 1.2 | 1.6 | 1.8 | 1.8 |
| DIESEL | .2 | .2 | .6 | .6 | 1.3 | 1.8 | 2.6 | 2.9 |
| OTHER | | | | | | | | |
| RAILROADS-COAL | 8.8 | 2.9 | .8 | .4 | .1 | .0 | .0 | .0 |
| -OIL | 1.2 | 1.3 | 1.2 | 2.2 | 1.7 | 1.7 | 2.8 | 1.7 |
| COKE PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| SMELTERS-COPPER | 122.0 | 123.0 | 97.0 | 156.0 | 312.0 | 280.0 | 60.0 | 52.0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS-DISTILLATE | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -RESIDUAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| OFF HIGHWAY DIESEL | .1 | .1 | .2 | .5 | .6 | .7 | .8 | .7 |
| CEMENT PLANT | .0 | .0 | 1.9 | 1.8 | 1.5 | 1.8 | 2.2 | 2.0 |
| WILD FIRES | .1 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| MISCELLANEOUS | 79.0 | 85.4 | 91.9 | 102.0 | 111.4 | 104.3 | 109.5 | 103.5 |

TABLE 3. SO2 EMISSIONS (1000 TONS) 1900-1945 NEW YORK

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | | | |
| ELECTRIC UTILITIES | 25.1 | 41.5 | 56.8 | 75.8 | 104.8 | 153.5 | 156.0 | 104.4 | 152.8 | 203.8 |
| INDUSTRIAL BOILERS | 178.4 | 242.0 | 297.3 | 350.1 | 365.4 | 383.1 | 325.7 | 267.6 | 302.6 | 349.3 |
| COMMERCIAL-RESIDENTIAL | 20.0 | 28.4 | 36.8 | 48.0 | 50.2 | 57.2 | 61.5 | 49.5 | 51.4 | 71.4 |
| ANTHRACITE COAL | | | | | | | | | | |
| ALL USES | 211.7 | 286.8 | 309.3 | 324.3 | 327.2 | 244.3 | 192.0 | 145.1 | 241.4 | 216.3 |
| RESIDUAL OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | 24.7 | 19.7 | 17.4 | 21.7 | 24.5 |
| INDUSTRIAL | NA | NA | NA | NA | NA | 30.9 | 29.5 | 29.2 | 31.1 | 33.6 |
| COMMERCIAL | NA | NA | NA | NA | NA | .6 | 1.1 | 1.7 | 2.0 | .8.3 |
| DISTILLATE OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .8 | .6 | .5 | .9 | 1.2 |
| INDUSTRIAL | NA | NA | NA | NA | NA | .5 | .5 | .5 | .8 | 2.1 |
| COMMERCIAL-RESIDENTIAL | NA | NA | NA | NA | NA | 2.0 | 3.4 | 5.4 | 7.4 | 7.4 |
| NATURAL GAS | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| WOOD | | | | | | | | | | |
| ALL USES | .4 | .4 | .4 | .4 | .4 | .3 | .3 | .3 | .3 | .3 |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE | .0 | .0 | .1 | .3 | .9 | 1.9 | 3.5 | 3.7 | 4.5 | 3.2 |
| DIESEL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL | 199.7 | 281.7 | 342.7 | 371.1 | 404.9 | 335.7 | 288.7 | 225.9 | 252.7 | 376.0 |
| -OIL | NA | NA | NA | NA | NA | .7 | .6 | .5 | .6 | .9 |
| COKE PLANTS | .0 | .0 | .0 | .0 | .1 | .1 | .2 | .1 | .2 | .2 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .6 | .3 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS FUEL OIL | NA | NA | NA | NA | NA | 38.0 | 45.1 | 35.7 | 20.8 | 22.7 |
| CEMENT PLANTS | .7 | 3.2 | 5.1 | 7.7 | 9.0 | 13.5 | 15.9 | 6.6 | 12.9 | NA |
| WILD FIRES | .0 | .0 | .0 | .0 | .0 | .0 | .1 | .0 | .0 | .0 |
| MISCELLANEOUS | 58.3 | 65.3 | 73.0 | 73.5 | 73.8 | 88.8 | 100.5 | 88.8 | 75.4 | 87.8 |

TABLE 4. SO2 EMISSIONS (1000 TONS) 1950-1980 NEW YORK

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | |
| ELECTRIC UTILITIES | 259.8 | 323.0 | 522.5 | 583.1 | 421.1 | 249.8 | 211.3 | 210.9 |
| INDUSTRIAL BOILERS | 227.4 | 212.6 | 159.2 | 202.1 | 192.5 | 84.1 | 94.3 | 110.3 |
| COMMERCIAL-RESIDENTIAL | 39.8 | 25.0 | 12.4 | 9.4 | 3.6 | 2.8 | 1.6 | 12.6 |
| ANTHRACITE COAL | | | | | | | | |
| ALL USES | 196.5 | 104.9 | 57.3 | 24.6 | 14.3 | 5.9 | 7.8 | 5.7 |
| RESIDUAL OIL | | | | | | | | |
| ELECTRIC UTILITIES | 88.7 | 28.6 | 42.0 | 94.4 | 233.6 | 327.7 | 280.2 | 254.8 |
| INDUSTRIAL | 44.8 | 46.9 | 51.7 | 48.7 | 75.5 | 29.3 | 39.2 | 73.0 |
| COMMERCIAL | 3.5 | 6.5 | 172.9 | 256.3 | 279.1 | 222.0 | 221.7 | 126.8 |
| DISTILLATE OIL | | | | | | | | |
| ELECTRIC UTILITIES | 1.4 | .2 | .2 | .2 | 2.9 | 5.7 | 4.1 | .7 |
| INDUSTRIAL | 5.2 | 5.5 | 2.7 | 4.0 | 1.7 | 1.4 | 4.1 | 4.5 |
| COMMERCIAL-RESIDENTIAL | 11.2 | 10.3 | 60.3 | 68.2 | 64.0 | 56.0 | 62.5 | 36.2 |
| NATURAL GAS | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| PIPELINES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| COMMERCIAL-RESIDENTIAL | .0 | .1 | .1 | .1 | .1 | .1 | .1 | .1 |
| WOOD | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | .1 | .1 | .1 | .1 | .1 | .1 | .2 | .2 |
| COMMERCIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDENTIAL | .5 | .4 | .3 | .3 | .3 | .3 | .5 | .6 |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE | 6.0 | 7.6 | 7.8 | 9.3 | 11.0 | 10.3 | 12.0 | 12.5 |
| DIESEL | .6 | .7 | .7 | 2.7 | 4.1 | 4.5 | 5.8 | 5.7 |
| OTHER | | | | | | | | |
| RAILROADS-COAL | 162.2 | 32.9 | 4.1 | .0 | .0 | .0 | .0 | .0 |
| -OIL | 3.2 | 5.4 | 5.3 | 4.2 | 3.2 | 2.0 | 2.5 | 1.7 |
| COKE PLANTS | 35.8 | 26.1 | 14.3 | 16.1 | 19.6 | 8.5 | 6.3 | 8.0 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS-DISTILLATE | .3 | .5 | .5 | .2 | .2 | .1 | .1 | .2 |
| -RESIDUAL | 20.3 | 21.9 | 18.6 | 19.7 | 22.2 | 10.4 | 8.0 | 15.2 |
| OFF HIGHWAY DIESEL | .3 | .4 | .6 | .6 | .7 | .8 | 1.3 | .7 |
| CEMENT PLANT | 20.6 | 29.1 | 28.6 | 42.8 | 37.9 | 27.0 | 28.8 | 27.6 |
| WILD FIRES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| MISCELLANEOUS | 103.2 | 85.3 | 70.0 | 68.6 | 61.1 | 31.0 | 29.1 | 25.5 |

TABLE 3. SO2 EMISSIONS (1000 TONS) 1900-1945 NORTH CAROLINA

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | | | |
| ELECTRIC UTILITIES | 1.6 | 2.7 | 3.6 | 4.9 | 9.7 | 20.1 | 24.8 | 19.6 | 33.8 | 53.3 |
| INDUSTRIAL BOILERS | 6.1 | 10.5 | 15.8 | 22.2 | 34.9 | 54.1 | 56.1 | 51.6 | 64.5 | 81.3 |
| COMMERCIAL-RESIDENTIAL | 6.1 | 10.9 | 17.2 | 26.5 | 29.4 | 33.5 | 40.9 | 39.6 | 48.2 | 77.1 |
| ANTHRACITE COAL | | | | | | | | | | |
| ALL USES | .6 | .9 | .9 | 1.0 | 1.0 | .7 | NA | NA | NA | NA |
| RESIDUAL OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDUSTRIAL | NA | NA | NA | NA | NA | .3 | .3 | .3 | .8 | .9 |
| COMMERCIAL | NA | NA | NA | NA | NA | .1 | .1 | .2 | .3 | .3 |
| DISTILLATE OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .1 | .1 | .1 | .1 | .2 |
| INDUSTRIAL | NA | NA | NA | NA | NA | .0 | .0 | .0 | .1 | .1 |
| COMMERCIAL-RESIDENTIAL | NA | NA | NA | NA | NA | .1 | .2 | .4 | .7 | 1.0 |
| NATURAL GAS | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| WOOD | | | | | | | | | | |
| ALL USES | .9 | .9 | .8 | .8 | .8 | .7 | .7 | .7 | .6 | .6 |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE | .0 | .0 | .0 | .1 | .2 | .4 | .6 | .7 | 1.1 | 1.1 |
| DIESEL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL | 14.4 | 25.9 | 38.8 | 50.3 | 60.8 | 53.4 | 48.4 | 39.9 | 46.0 | 69.6 |
| -OIL | NA | NA | NA | NA | NA | .0 | .0 | .0 | .1 | .4 |
| COKE PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS FUEL OIL | NA | NA | NA | NA | NA | .1 | .1 | .1 | .1 | 1.4 |
| CEMENT PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| WILD FIRES | .3 | .3 | .3 | .3 | .3 | .3 | .3 | .1 | .3 | .3 |
| MISCELLANEOUS | 21.6 | 23.4 | 25.5 | 26.3 | 26.9 | 31.8 | 35.7 | 32.8 | 29.5 | 37.2 |

TABLE 4. SO2 EMISSIONS (1000 TONS) 1950-1980 NORTH CAROLINA

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | |
| ELECTRIC UTILITIES | 91.2 | 133.7 | 128.4 | 224.5 | 418.1 | 437.2 | 415.6 | 429.7 |
| INDUSTRIAL BOILERS | 65.3 | 61.0 | 49.2 | 50.4 | 48.6 | 21.6 | 32.3 | 29.1 |
| COMMERCIAL-RESIDENTIAL | 52.6 | 33.1 | 20.6 | 11.2 | 11.1 | 4.0 | 1.1 | 3.1 |
| ANTHRACITE COAL | | | | | | | | |
| ALL USES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDUAL OIL | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .2 | 3.4 | .0 |
| INDUSTRIAL | 2.3 | 6.8 | 15.2 | 18.3 | 24.7 | 34.1 | 58.0 | 54.4 |
| COMMERCIAL | 2.0 | 3.3 | 3.7 | 1.8 | 8.4 | 8.7 | 10.8 | 3.4 |
| DISTILLATE OIL | | | | | | | | |
| ELECTRIC UTILITIES | .2 | .1 | .0 | .0 | 1.2 | .2 | .9 | .3 |
| INDUSTRIAL | .4 | .5 | .5 | .5 | .5 | 1.4 | 1.8 | 1.3 |
| COMMERCIAL-RESIDENTIAL | 4.3 | 9.3 | 15.2 | 10.8 | 12.5 | 8.6 | 8.1 | 7.7 |
| NATURAL GAS | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| PIPELINES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| COMMERCIAL-RESIDENTIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| WOOD | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | .1 | .1 | .1 | .1 | .1 | .1 | .2 | .2 |
| COMMERCIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDENTIAL | .9 | .7 | .6 | .4 | .3 | .3 | .4 | .6 |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE | 2.1 | 2.8 | 3.0 | 3.8 | 4.7 | 5.8 | 6.8 | 6.6 |
| DIESEL | .2 | .3 | .6 | 1.1 | 3.0 | 4.2 | 6.1 | 6.5 |
| OTHER | | | | | | | | |
| RAILROADS-COAL | 38.2 | 11.9 | 2.0 | .0 | .0 | .0 | .0 | .0 |
| -OIL | 1.3 | 2.6 | 2.2 | 3.1 | 2.1 | 1.8 | 1.7 | 1.8 |
| COKE PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| SMELTERS-COPPER | .0 | .0 | 12.0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS-DISTILLATE | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -RESIDUAL | .0 | .2 | .1 | .2 | .3 | .2 | .1 | .1 |
| OFF HIGHWAY DIESEL | .3 | .3 | .2 | .2 | .4 | .5 | .8 | .3 |
| CEMENT PLANT | .0 | .0 | .0 | 4.8 | 3.4 | 3.2 | 7.5 | 6.7 |
| WILD FIRES | .3 | .5 | .1 | .1 | .1 | .0 | .0 | .0 |
| MISCELLANEOUS | 45.9 | 42.2 | 39.2 | 42.1 | 42.7 | 32.9 | 33.5 | 31.1 |

TABLE 3. SO2 EMISSIONS (1000 TONS) 1900-1945 NORTH DAKOTA

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | | | |
| ELECTRIC UTILITIES | 2.1 | 3.5 | 4.8 | 6.5 | 7.4 | 7.8 | 7.2 | 5.0 | 7.8 | 11.2 |
| INDUSTRIAL BOILERS | .6 | 1.2 | 1.9 | 2.9 | 2.7 | 1.8 | 1.3 | 1.2 | 1.5 | 1.8 |
| COMMERCIAL-RESIDENTIAL | 1.0 | 2.1 | 3.6 | 5.9 | 6.6 | 7.5 | 7.8 | 5.9 | 5.7 | 7.3 |
| ANTHRACITE COAL | | | | | | | | | | |
| ALL USES | 3.7 | 5.0 | 5.4 | 5.6 | 5.7 | 4.2 | NA | NA | NA | NA |
| RESIDUAL OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .0 | .0 | .0 | .0 | NA |
| INDUSTRIAL | NA | NA | NA | NA | NA | .0 | .0 | .0 | NA | .0 |
| COMMERCIAL | NA | NA | NA | NA | NA | .0 | .1 | .1 | NA | .1 |
| DISTILLATE OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | NA | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .0 |
| COMMERCIAL-RESIDENTIAL | NA | NA | NA | NA | NA | .0 | .0 | .1 | .3 | .3 |
| NATURAL GAS | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | .0 | .0 | .0 | NA | NA | .0 |
| INDUSTRIAL | NA | NA | .0 | NA | NA | .0 | NA | NA | NA | NA |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | .0 | .0 | .0 | NA | NA | NA | NA | NA |
| WOOD | | | | | | | | | | |
| ALL USES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE | .0 | .0 | .0 | .0 | .1 | .1 | .2 | .2 | .2 | .2 |
| DIESEL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL | 3.1 | 6.6 | 10.9 | 15.1 | 17.7 | 14.2 | 11.8 | 9.0 | 9.4 | 12.8 |
| -OIL | NA | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .8 |
| COKE PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS FUEL OIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CEMENT PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| WILD FIRES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| MISCELLANEOUS | 4.9 | 6.1 | 7.4 | 7.7 | 7.9 | 8.6 | 9.2 | 9.0 | 8.8 | 9.9 |

TABLE 4. SO2 EMISSIONS (1000 TONS) 1950-1980 NORTH DAKOTA

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | |
| ELECTRIC UTILITIES | 35.8 | 32.3 | 16.7 | 15.9 | 32.8 | 46.9 | 70.9 | 93.2 |
| INDUSTRIAL BOILERS | 2.2 | 2.1 | 6.9 | 5.6 | 4.1 | 4.3 | 7.0 | 6.2 |
| COMMERCIAL-RESIDENTIAL | 6.2 | 3.9 | 8.9 | 4.5 | 2.0 | .9 | .7 | 1.5 |
| ANTHRACITE COAL | | | | | | | | |
| ALL USES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDUAL OIL | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | .1 | 1.5 | 2.6 | 3.1 | 3.3 | 2.0 | 1.9 | 1.5 |
| COMMERCIAL | .1 | .1 | .4 | 1.2 | .4 | 4.0 | 2.6 | 2.1 |
| DISTILLATE OIL | | | | | | | | |
| ELECTRIC UTILITIES | .1 | .0 | .0 | .0 | .0 | .0 | .1 | .1 |
| INDUSTRIAL | .1 | .1 | .0 | .2 | .1 | .1 | .0 | .3 |
| COMMERCIAL-RESIDENTIAL | .9 | 1.2 | 3.1 | 2.8 | 2.7 | 1.4 | .9 | 1.9 |
| NATURAL GAS | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| PIPELINES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| COMMERCIAL-RESIDENTIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| WOOD | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| COMMERCIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDENTIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE | .3 | .4 | .4 | .5 | .6 | .7 | .8 | .8 |
| DIESEL | .1 | .2 | .1 | .2 | 1.0 | .7 | 1.0 | 1.3 |
| OTHER | | | | | | | | |
| RAILROADS-COAL | 7.0 | 2.3 | 1.3 | .6 | .2 | .0 | .0 | .0 |
| -OIL | .6 | .7 | .5 | .7 | .7 | 1.0 | 1.4 | 1.6 |
| COKE PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS-DISTILLATE | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -RESIDUAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| OFF HIGHWAY DIESEL | .1 | .2 | .5 | .5 | .3 | .2 | .1 | .1 |
| CEMENT PLANT | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| WILD FIRES | .0 | .0 | .0 | .0 | .0 | .0 | .1 | .1 |
| MISCELLANEOUS | 11.0 | 11.3 | 11.7 | 11.7 | 12.0 | 10.6 | 11.1 | 10.5 |

TABLE 3. SO2 EMISSIONS (1000 TONS) 1900-1945 OHIO

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | | | |
| ELECTRIC UTILITIES | 53.7 | 88.9 | 121.5 | 162.1 | 195.2 | 229.4 | 230.2 | 174.0 | 288.9 | 439.5 |
| INDUSTRIAL BOILERS | 495.5 | 666.8 | 812.5 | 948.5 | 982.6 | 1023.5 | 875.2 | 728.7 | 834.7 | 975.5 |
| COMMERCIAL-RESIDENTIAL | 104.2 | 146.6 | 188.1 | 243.5 | 253.5 | 289.1 | 330.3 | 292.4 | 331.9 | 501.4 |
| ANTHRACITE COAL | | | | | | | | | | |
| ALL USES | 6.1 | 8.3 | 8.9 | 9.4 | 9.4 | 7.1 | 1.4 | 1.1 | 1.8 | 1.7 |
| RESIDUAL OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .1 | .1 | .1 | .1 | .1 |
| INDUSTRIAL | NA | NA | NA | NA | NA | 31.0 | 29.7 | 29.4 | 30.7 | 53.2 |
| COMMERCIAL | NA | NA | NA | NA | NA | .5 | .8 | 1.4 | 1.0 | .4 |
| DISTILLATE OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .0 | .0 | .0 | .1 | .1 |
| INDUSTRIAL | NA | NA | NA | NA | NA | .3 | .3 | .3 | .6 | 1.8 |
| COMMERCIAL-RESIDENTIAL | NA | NA | NA | NA | NA | .1 | .2 | .3 | .5 | .9 |
| NATURAL GAS | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| WOOD | | | | | | | | | | |
| ALL USES | .4 | .4 | .4 | .4 | .4 | .3 | .3 | .3 | .3 | .3 |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE | .0 | .0 | .0 | .2 | .7 | 1.4 | 2.2 | 2.3 | 3.2 | 2.7 |
| DIESEL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL | 278.1 | 389.3 | 469.7 | 504.0 | 547.8 | 454.3 | 390.6 | 305.7 | 341.9 | 508.6 |
| -OIL | NA | NA | NA | NA | NA | .1 | .1 | .1 | .2 | .7 |
| COKE PLANTS | .1 | .1 | .1 | .1 | .2 | .2 | .3 | .2 | .3 | .4 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS FUEL OIL | NA | NA | NA | NA | NA | .3 | .4 | .3 | .6 | .6 |
| CEMENT PLANTS | 1.2 | 3.0 | 3.5 | 4.4 | 4.4 | 13.0 | 19.7 | 8.9 | 15.2 | 10.5 |
| WILD FIRES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| MISCELLANEOUS | 42.4 | 45.7 | 49.4 | 50.7 | 51.6 | 60.8 | 68.0 | 62.2 | 55.5 | 67.5 |

TABLE 4. SO2 EMISSIONS (1000 TONS) 1950-1980 OHIO

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | |
| ELECTRIC UTILITIES | 658.0 | 869.3 | 1471.3 | 1701.0 | 2241.1 | 2649.9 | 2253.9 | 2344.6 |
| INDUSTRIAL BOILERS | 661.6 | 618.3 | 638.4 | 750.8 | 738.7 | 338.4 | 359.0 | 265.7 |
| COMMERCIAL-RESIDENTIAL | 413.6 | 260.1 | 139.3 | 92.1 | 77.4 | 33.3 | 17.3 | 26.1 |
| ANTHRACITE COAL | | | | | | | | |
| ALL USES | 1.1 | 2.2 | 2.6 | 2.2 | 2.7 | 1.0 | .9 | 1.5 |
| RESIDUAL OIL | | | | | | | | |
| ELECTRIC UTILITIES | .7 | .1 | .2 | .2 | 1.5 | 9.2 | 7.8 | .1 |
| INDUSTRIAL | 78.7 | 82.0 | 46.8 | 42.5 | 19.8 | 25.8 | 30.2 | 27.3 |
| COMMERCIAL | .4 | 2.2 | 2.9 | 2.2 | 2.5 | 14.4 | 13.7 | 1.9 |
| DISTILLATE OIL | | | | | | | | |
| ELECTRIC UTILITIES | .2 | .2 | .1 | .1 | .7 | 2.7 | 4.2 | 1.5 |
| INDUSTRIAL | 2.7 | 3.0 | 1.9 | 1.7 | 2.0 | 3.6 | 5.4 | 4.3 |
| COMMERCIAL-RESIDENTIAL | 2.5 | 4.1 | 11.2 | 14.0 | 12.9 | 11.6 | 15.7 | 7.6 |
| NATURAL GAS | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | .0 | .0 | .1 | .1 | .1 | .1 | .1 | .1 |
| PIPELINES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| COMMERCIAL-RESIDENTIAL | .1 | .1 | .1 | .2 | .2 | .2 | .2 | .0 |
| WOOD | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | .0 | .0 | .1 | .1 | .1 | .1 | .1 | .1 |
| COMMERCIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDENTIAL | .4 | .3 | .3 | .2 | .2 | .2 | .4 | .5 |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE | 5.0 | 6.4 | 6.4 | 7.7 | 9.0 | 10.1 | 11.5 | 11.6 |
| DIESEL | .4 | .6 | 1.1 | 2.9 | 5.8 | 8.9 | 11.0 | 12.1 |
| OTHER | | | | | | | | |
| RAILROADS-COAL | 219.4 | 44.5 | 4.9 | .0 | .0 | .0 | .0 | .0 |
| -OIL | 2.9 | 5.8 | 7.3 | 6.6 | 4.3 | 4.6 | 4.8 | 9.1 |
| COKE PLANTS | 56.8 | 65.1 | 32.4 | 30.1 | 31.8 | 33.4 | 26.3 | 24.8 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .1 | .1 | .1 |
| VESSELS-DISTILLATE | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -RESIDUAL | .2 | .2 | .3 | .6 | .6 | .8 | .9 | .3 |
| OFF HIGHWAY DIESEL | .3 | .6 | .8 | 1.3 | 1.9 | 1.3 | 1.7 | 1.7 |
| CEMENT PLANT | 24.2 | 31.8 | 41.1 | 35.6 | 28.9 | 31.2 | 28.2 | 23.7 |
| WILD FIRES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| MISCELLANEOUS | 81.1 | 73.9 | 68.1 | 72.6 | 72.3 | 52.7 | 53.2 | 49.1 |

TABLE 3. SO2 EMISSIONS (1000 TONS) 1900-1945 OKLAHOMA

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | | | |
| ELECTRIC UTILITIES | 2.3 | 3.8 | 5.2 | 7.0 | 13.1 | 25.8 | 26.8 | 15.8 | 19.4 | 20.1 |
| INDUSTRIAL BOILERS | 8.7 | 17.6 | 29.1 | 43.5 | 43.3 | 35.0 | 24.3 | 17.5 | 17.1 | 16.8 |
| COMMERCIAL-RESIDENTIAL | 8.0 | 16.7 | 28.7 | 46.9 | 53.0 | 60.4 | 59.4 | 40.1 | 33.3 | 34.6 |
| ANTHRACITE COAL | | | | | | | | | | |
| ALL USES | .0 | .0 | .0 | .0 | .0 | .0 | NA | NA | NA | NA |
| RESIDUAL OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | 4.0 | 3.2 | 2.8 | 3.6 | 6.5 |
| INDUSTRIAL | NA | NA | NA | NA | NA | 10.7 | 10.3 | 10.2 | 8.5 | 8.6 |
| COMMERCIAL | NA | NA | NA | NA | NA | .1 | .1 | .2 | .2 | .1 |
| DISTILLATE OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | NA | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .0 |
| COMMERCIAL-RESIDENTIAL | NA | NA | NA | NA | NA | .0 | .1 | .1 | .2 | .6 |
| NATURAL GAS | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | NA | NA | .0 | .0 | .0 | .1 | .1 | .0 | .1 | .1 |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| WOOD | | | | | | | | | | |
| ALL USES | .2 | .1 | .1 | .1 | .1 | .1 | .1 | .1 | .1 | .1 |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE | .0 | .0 | .0 | .1 | .2 | .4 | .7 | .7 | .9 | .7 |
| DIESEL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL | 33.1 | 70.0 | 115.4 | 160.0 | 187.2 | 150.6 | 125.5 | 95.0 | 99.7 | 135.9 |
| -OIL | NA | NA | NA | NA | NA | 9.1 | 8.6 | 7.0 | 6.9 | 7.1 |
| COKE PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .5 | 1.3 | 20.4 | 23.8 | 6.9 | 7.6 | 6.3 | 3.8 |
| -ZINC | .0 | .0 | 32.4 | 65.2 | 36.0 | 77.0 | 44.1 | 33.1 | 63.7 | 61.5 |
| VESSELS FUEL OIL | NA | NA | NA | NA | Na | NA | NA | NA | NA | .0 |
| CEMENT PLANTS | .0 | .0 | NA | NA | NA | NA | NA | NA | NA | NA |
| WILD FIRES | .1 | .1 | .1 | .1 | .1 | .1 | 1.5 | .4 | 2.3 | 1.0 |
| MISCELLANEOUS | 14.6 | 18.6 | 22.9 | 23.9 | 24.6 | 28.7 | 31.9 | 29.9 | 27.5 | 32.8 |

TABLE 4. SO2 EMISSIONS (1000 TONS) 1950-1980 OKLAHOMA

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | |
| ELECTRIC UTILITIES | 3.3 | .1 | .0 | .0 | .0 | .0 | 10.1 | 59.3 |
| INDUSTRIAL BOILERS | .0 | 27.5 | 13.6 | 15.4 | .0 | .5 | 15.0 | 17.2 |
| COMMERCIAL-RESIDENTIAL | 1.6 | 1.0 | .6 | .2 | .0 | .1 | .0 | 1.1 |
| ANTHRACITE COAL | | | | | | | | |
| ALL USES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDUAL OIL | | | | | | | | |
| ELECTRIC UTILITIES | 4.6 | .3 | .1 | .0 | .1 | 2.1 | .0 | .0 |
| INDUSTRIAL | 5.0 | 5.2 | 7.5 | 2.9 | 3.2 | 2.4 | 4.5 | 3.7 |
| COMMERCIAL | .0 | .1 | .1 | .1 | .5 | .6 | .3 | .2 |
| DISTILLATE OIL | | | | | | | | |
| ELECTRIC UTILITIES | .2 | .0 | .0 | .0 | .0 | .4 | .3 | .0 |
| INDUSTRIAL | .2 | .1 | .2 | .1 | .1 | 1.0 | 1.3 | 1.0 |
| COMMERCIAL-RESIDENTIAL | 1.3 | 1.4 | .6 | 1.1 | 1.1 | 1.5 | 2.4 | .4 |
| NATURAL GAS | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .1 | .1 | .1 | .1 |
| INDUSTRIAL | .1 | .1 | .1 | .1 | .0 | .0 | .1 | .1 |
| PIPELINES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| COMMERCIAL-RESIDENTIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| WOOD | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| COMMERCIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDENTIAL | .2 | .1 | .1 | .1 | .1 | .1 | .1 | .2 |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE | 1.4 | 1.8 | 1.8 | 2.3 | 2.9 | 3.6 | 4.3 | 4.4 |
| DIESEL | .2 | .2 | .5 | .6 | 1.6 | 2.9 | 4.3 | 5.2 |
| OTHER | | | | | | | | |
| RAILROADS-COAL | 74.0 | 24.0 | 4.2 | 2.1 | 1.2 | .0 | .0 | .0 |
| -OIL | 4.7 | 1.5 | .7 | .9 | .9 | .9 | .7 | .9 |
| COKE PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | 6.2 | 4.2 | .3 | 1.9 | .0 | .0 | .0 | .0 |
| -ZINC | 85.1 | 110.7 | 76.8 | 38.5 | 25.5 | 14.8 | 13.5 | 8.9 |
| VESSELS-DISTILLATE | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -RESIDUAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| OFF HIGHWAY DIESEL | .1 | .1 | .4 | .5 | .9 | .8 | 1.5 | .7 |
| CEMENT PLANT | 5.3 | 6.7 | 7.6 | 8.3 | 6.3 | 6.8 | 8.4 | 8.4 |
| WILD FIRES | 1.1 | .1 | .2 | .4 | .1 | .1 | .2 | .1 |
| MISCELLANEOUS | 38.2 | 39.0 | 40.0 | 40.8 | 41.8 | 36.1 | 37.6 | 35.4 |

TABLE 3. SO2 EMISSIONS (1000 TONS) 1900-1945 OREGON

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL BOILERS | 1.3 | 2.2 | 3.3 | 4.5 | 4.0 | 2.4 | 2.1 | 2.6 | 3.9 | 5.5 |
| COMMERCIAL-RESIDENTIAL | 1.1 | 1.9 | 2.9 | 4.4 | 4.9 | 5.6 | 6.0 | 4.8 | 5.0 | 7.0 |
| ANTHRACITE COAL | | | | | | | | | | |
| ALL USES | .0 | .0 | .0 | .0 | .0 | .0 | NA | NA | NA | NA |
| RESIDUAL OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | 11.7 | 9.3 | 8.2 | 6.9 | 12.0 |
| INDUSTRIAL | NA | NA | NA | NA | NA | 11.6 | 11.1 | 11.0 | 10.5 | 12.0 |
| COMMERCIAL | NA | NA | NA | NA | NA | .5 | .9 | 1.5 | 1.8 | 5.9 |
| DISTILLATE OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | 1.4 | 1.1 | 1.0 | .0 | .2 |
| INDUSTRIAL | NA | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .2 |
| COMMERCIAL-RESIDENTIAL | NA | NA | NA | NA | NA | .1 | .2 | .3 | .6 | .8 |
| NATURAL GAS | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | NA | NA | .0 | .0 | NA | .0 | .0 | .0 | .0 | .0 |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| WOOD | | | | | | | | | | |
| ALL USES | .8 | .7 | .7 | .7 | .6 | .6 | .6 | .6 | .5 | .5 |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE | .0 | .0 | .0 | .0 | .1 | .2 | .4 | .4 | .6 | .6 |
| DIESEL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL | 4.7 | 8.2 | 12.0 | 15.3 | 17.5 | 14.1 | 11.7 | 8.9 | 9.3 | 12.7 |
| -OIL | NA | NA | NA | NA | NA | 8.2 | 7.7 | 6.3 | 5.9 | 10.6 |
| COKE PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| SMELTERS-COPPER | .0 | .9 | .0 | .8 | 2.4 | .1 | .2 | .4 | .2 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS FUEL OIL | NA | NA | NA | NA | NA | 1.9 | 2.3 | 1.8 | 2.2 | 10.7 |
| CEMENT PLANTS | .0 | .0 | .0 | .0 | NA | NA | NA | NA | NA | NA |
| WILD FIRES | .3 | .3 | .3 | .3 | .3 | .3 | .3 | .4 | .2 | 1.0 |
| MISCELLANEOUS | 4.8 | 5.8 | 7.0 | 7.2 | 7.4 | 8.7 | 9.8 | 8.9 | 7.9 | 10.7 |

TABLE 4. SO2 EMISSIONS (1000 TONS) 1950-1980 OREGON

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .5 | 11.9 |
| INDUSTRIAL BOILERS | 2.5 | 2.3 | .0 | .0 | .6 | 1.3 | 3.3 | 3.4 |
| COMMERCIAL-RESIDENTIAL | 4.9 | 3.1 | 1.8 | 1.4 | .3 | .1 | .1 | .2 |
| ANTHRACITE COAL | | | | | | | | |
| ALL USES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDUAL OIL | | | | | | | | |
| ELECTRIC UTILITIES | 16.5 | 16.9 | .1 | .0 | .5 | .9 | .0 | .0 |
| INDUSTRIAL | 15.5 | 18.3 | 11.7 | 8.2 | 12.2 | 8.9 | 9.6 | 12.6 |
| COMMERCIAL | 1.4 | 2.1 | 12.9 | 12.7 | 20.1 | 12.4 | 6.2 | 4.4 |
| DISTILLATE OIL | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .3 | .0 | .3 |
| INDUSTRIAL | .8 | 1.2 | 1.5 | 1.0 | .8 | 1.5 | 2.1 | 1.1 |
| COMMERCIAL-RESIDENTIAL | 1.6 | 2.3 | 8.8 | 6.9 | 4.2 | 3.8 | 3.3 | 3.1 |
| NATURAL GAS | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| PIPELINES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| COMMERCIAL-RESIDENTIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| WOOD | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | .1 | .1 | .1 | .1 | .2 | .2 | .2 | .2 |
| COMMERCIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDENTIAL | .4 | .3 | .2 | .2 | .1 | .1 | .2 | .2 |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE | 1.1 | 1.3 | 1.4 | 1.8 | 2.2 | 2.5 | 3.2 | 3.1 |
| DIESEL | .5 | .4 | .6 | 1.0 | 1.9 | 2.5 | 3.9 | 4.2 |
| OTHER | | | | | | | | |
| RAILROADS-COAL | 6.9 | 2.3 | .0 | .0 | .1 | .0 | .0 | .0 |
| -OIL | 6.2 | 3.3 | 2.3 | 2.3 | 2.4 | 2.7 | 3.5 | 3.5 |
| COKE PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS-DISTILLATE | .0 | .0 | .0 | .1 | .0 | .1 | .1 | .0 |
| -RESIDUAL | 1.1 | 1.4 | 1.1 | .6 | 1.2 | .4 | 2.4 | 1.5 |
| OFF HIGHWAY DIESEL | .3 | .5 | .7 | .8 | .4 | .3 | .5 | 1.0 |
| CEMENT PLANT | 1.7 | 1.9 | 2.1 | 3.6 | 2.1 | 2.4 | 2.8 | 2.9 |
| WILD FIRES | .1 | .2 | .4 | .1 | .2 | .1 | .1 | .3 |
| MISCELLANEOUS | 14.0 | 11.7 | 9.9 | 11.6 | 11.8 | 7.9 | 7.8 | 7.1 |

TABLE 3. SO2 EMISSIONS (1000 TONS) 1900-1945 PENNSYLVANIA

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | | | |
| ELECTRIC UTILITIES | 23.6 | 39.1 | 53.5 | 71.4 | 111.2 | 186.7 | 199.6 | 135.7 | 202.4 | 275.9 |
| INDUSTRIAL BOILERS | 304.2 | 473.6 | 660.5 | 875.1 | 994.7 | 1110.8 | 909.8 | 670.8 | 674.7 | 685.0 |
| COMMERCIAL-RESIDENTIAL | 23.7 | 38.5 | 56.2 | 82.1 | 89.4 | 102.0 | 113.8 | 97.3 | 107.0 | 157.3 |
| ANTHRACITE COAL | | | | | | | | | | |
| ALL USES | 237.2 | 321.4 | 346.6 | 363.4 | 366.6 | 273.8 | 106.3 | 80.3 | 133.7 | 150.9 |
| RESIDUAL OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | 6.1 | 4.9 | 4.3 | 7.1 | 13.5 |
| INDUSTRIAL | NA | NA | NA | NA | NA | 67.9 | 64.9 | 64.3 | 62.4 | 100.5 |
| COMMERCIAL | NA | NA | NA | NA | NA | 1.0 | 1.6 | 2.6 | 4.8 | 20.8 |
| DISTILLATE OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .1 | .1 | .1 | .0 | .2 |
| INDUSTRIAL | NA | NA | NA | NA | NA | .8 | .8 | .8 | .9 | 3.3 |
| COMMERCIAL-RESIDENTIAL | NA | NA | NA | NA | NA | .2 | .4 | .6 | 1.0 | 3.1 |
| NATURAL GAS | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| WOOD | | | | | | | | | | |
| ALL USES | .6 | .5 | .5 | .5 | .5 | .4 | .4 | .4 | .4 | .4 |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE | .0 | .0 | .0 | .1 | .4 | 1.0 | 2.2 | 2.7 | 3.7 | 2.8 |
| DIESEL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL | 80.6 | 130.5 | 180.6 | 220.7 | 252.4 | 209.3 | 179.9 | 140.8 | 157.5 | 234.3 |
| -OIL | NA | NA | NA | NA | NA | .4 | .3 | .3 | .3 | .8 |
| COKE PLANTS | .4 | .6 | .8 | .9 | 1.1 | .8 | .7 | .5 | .8 | .9 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .6 | .5 | 2.8 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | 24.2 | 55.4 | 56.4 | 67.5 | 115.6 | 116.4 |
| VESSELS FUEL OIL | NA | NA | NA | NA | NA | 16.5 | 19.6 | 15.5 | 11.6 | 20.5 |
| CEMENT PLANTS | 10.3 | 28.5 | 55.0 | 59.0 | 58.3 | 87.3 | 78.0 | 31.9 | 55.3 | 32.1 |
| WILD FIRES | .1 | .1 | .1 | .1 | .1 | .1 | .3 | .1 | .0 | .0 |
| MISCELLANEOUS | 64.0 | 70.5 | 77.8 | 79.6 | 81.0 | 91.3 | 99.3 | 93.5 | 86.8 | 99.1 |

TABLE 4. SO2 EMISSIONS (1000 TONS) 1950-1980 PENNSYLVANIA

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | |
| ELECTRIC UTILITIES | 444.5 | 526.4 | 662.2 | 901.9 | 1427.3 | 1418.8 | 1089.5 | 1377.6 |
| INDUSTRIAL BOILERS | 312.7 | 292.3 | 331.6 | 170.4 | 288.6 | 160.0 | 168.7 | 174.0 |
| COMMERCIAL-RESIDENTIAL | 124.8 | 78.5 | 36.9 | 23.5 | 32.2 | 5.1 | 7.2 | 57.3 |
| ANTHRACITE COAL | | | | | | | | |
| ALL USES | 195.8 | 151.5 | 139.8 | 117.4 | 96.8 | 67.7 | 71.4 | 46.0 |
| RESIDUAL OIL | | | | | | | | |
| ELECTRIC UTILITIES | 16.0 | 12.2 | 15.0 | 17.9 | 100.6 | 19.5 | 53.0 | 36.8 |
| INDUSTRIAL | 140.4 | 144.2 | 109.5 | 106.2 | 84.4 | 67.3 | 82.3 | 56.8 |
| COMMERCIAL | 3.4 | 3.1 | 45.1 | 52.9 | 67.9 | 59.3 | 45.0 | 8.6 |
| DISTILLATE OIL | | | | | | | | |
| ELECTRIC UTILITIES | .4 | .1 | .1 | .1 | 3.6 | 1.9 | 2.0 | 1.3 |
| INDUSTRIAL | 5.5 | 7.1 | 3.3 | 3.3 | 2.1 | 3.1 | 4.0 | 4.6 |
| COMMERCIAL-RESIDENTIAL | 4.4 | 4.2 | 27.2 | 30.4 | 29.5 | 26.1 | 28.3 | 24.3 |
| NATURAL GAS | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | .0 | .1 | .1 | .1 | .1 | .1 | .1 | .1 |
| PIPELINES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| COMMERCIAL-RESIDENTIAL | .0 | .1 | .1 | .1 | .1 | .1 | .1 | .1 |
| WOOD | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | .0 | .1 | .1 | .1 | .1 | .1 | .1 | .2 |
| COMMERCIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDENTIAL | .5 | .4 | .3 | .3 | .3 | .3 | .5 | .7 |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE | 5.1 | 6.5 | 6.6 | 7.5 | 9.1 | 10.1 | 11.9 | 11.5 |
| DIESEL | .4 | .5 | 1.6 | 2.9 | 5.8 | 9.6 | 10.9 | 12.0 |
| OTHER | | | | | | | | |
| RAILROADS-COAL | 101.1 | 20.5 | 2.3 | .0 | .0 | .0 | .0 | .0 |
| -OIL | 4.8 | 7.1 | 6.0 | 5.5 | 4.4 | 3.7 | 4.9 | 5.2 |
| COKE PLANTS | 103.4 | 133.9 | 70.3 | 92.8 | 73.6 | 68.4 | 51.3 | 47.7 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | 95.3 | 150.3 | 94.2 | 47.2 | 31.3 | 3.1 | 2.9 | 1.9 |
| VESSELS-DISTILLATE | .1 | .1 | .1 | .0 | .0 | .1 | .1 | .1 |
| -RESIDUAL | 4.4 | 9.6 | 6.0 | 4.8 | 5.4 | 4.8 | 5.4 | 6.1 |
| OFF HIGHWAY DIESEL | .2 | .3 | .3 | .9 | .6 | 1.5 | 2.3 | 1.7 |
| CEMENT PLANT | 79.6 | 96.6 | 71.0 | 75.4 | 90.8 | 54.2 | 76.6 | 62.5 |
| WILD FIRES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| MISCELLANEOUS | 112.5 | 105.6 | 100.2 | 99.9 | 98.2 | 76.7 | 78.8 | 73.6 |

TABLE 3. SO2 EMISSIONS (1000 TONS) 1900-1945 RHODE ISLAND

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | | | |
| ELECTRIC UTILITIES | 1.5 | 2.5 | 3.5 | 4.6 | 5.4 | 5.8 | 5.1 | 3.2 | 4.3 | 5.3 |
| INDUSTRIAL BOILERS | 15.1 | 19.0 | 21.6 | 23.2 | 22.5 | 22.4 | 17.9 | 13.8 | 14.6 | 15.8 |
| COMMERCIAL-RESIDENTIAL | 2.3 | 3.0 | 3.6 | 4.3 | 4.3 | 4.9 | 5.5 | 4.7 | 5.1 | 7.5 |
| ANTHRACITE COAL | | | | | | | | | | |
| ALL USES | 20.0 | 27.1 | 29.3 | 30.7 | 31.0 | 23.1 | 8.0 | 6.1 | 10.1 | 10.8 |
| RESIDUAL OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | 18.9 | 15.1 | 13.3 | 15.1 | 9.3 |
| INDUSTRIAL | NA | NA | NA | NA | NA | 15.2 | 14.5 | 14.4 | 14.4 | 9.1 |
| COMMERCIAL | NA | NA | NA | NA | NA | .1 | .1 | .1 | .8 | 1.2 |
| DISTILLATE OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | NA | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .4 |
| COMMERCIAL-RESIDENTIAL | NA | NA | NA | NA | NA | .7 | 1.2 | 2.0 | 2.5 | 2.1 |
| NATURAL GAS | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| WOOD | | | | | | | | | | |
| ALL USES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE | .0 | .0 | .0 | .0 | .0 | .1 | .2 | .3 | .3 | .2 |
| DIESEL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL | 7.3 | 9.6 | 10.8 | 10.6 | 11.1 | 9.2 | 7.9 | 6.2 | 6.9 | 10.3 |
| -OIL | NA | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .0 |
| COKE PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS FUEL OIL | NA | NA | NA | NA | NA | 1.3 | 1.6 | 1.3 | 1.2 | .2 |
| CEMENT PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| WILD FIRES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| MISCELLANEOUS | 3.2 | 3.6 | 4.0 | 4.0 | 4.0 | 4.6 | 5.1 | 4.6 | 4.0 | 4.4 |

TABLE 4. SO2 EMISSIONS (1000 TONS) 1950-1980 RHODE ISLAND

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | |
| ELECTRIC UTILITIES | 5.7 | 12.8 | 23.5 | 16.5 | .0 | .0 | .0 | .0 |
| INDUSTRIAL BOILERS | .0 | 10.7 | 18.9 | .6 | .2 | .0 | .1 | .1 |
| COMMERCIAL-RESIDENTIAL | 3.2 | 2.0 | 2.7 | .1 | .0 | .0 | .0 | .1 |
| ANTHRACITE COAL | | | | | | | | |
| ALL USES | 3.8 | 1.7 | .2 | .1 | .0 | .0 | .0 | .1 |
| RESIDUAL OIL | | | | | | | | |
| ELECTRIC UTILITIES | 22.1 | 11.9 | 4.5 | 7.6 | 23.4 | 5.2 | 3.8 | 4.2 |
| INDUSTRIAL | 20.2 | 19.7 | 12.0 | 7.1 | 8.2 | 4.4 | 3.7 | 3.1 |
| COMMERCIAL | 4.7 | 14.0 | 11.5 | 5.1 | 20.9 | 8.4 | 7.6 | .9 |
| DISTILLATE OIL | | | | | | | | |
| ELECTRIC UTILITIES | .2 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | .1 | .2 | .2 | .1 | .1 | .1 | .1 | .2 |
| COMMERCIAL-RESIDENTIAL | 3.2 | 2.7 | 5.9 | 5.1 | 5.1 | 4.4 | 4.6 | 2.7 |
| NATURAL GAS | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| PIPELINES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| COMMERCIAL-RESIDENTIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| WOOD | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| COMMERCIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDENTIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE | .4 | .5 | .5 | .6 | .7 | .9 | 1.0 | .9 |
| DIESEL | .0 | .0 | .1 | .1 | .4 | .3 | .4 | .5 |
| OTHER | | | | | | | | |
| RAILROADS-COAL | 4.4 | .9 | .1 | .0 | .0 | .0 | .0 | .0 |
| -OIL | .1 | .1 | .1 | .1 | .1 | .1 | .0 | .0 |
| COKE PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS-DISTILLATE | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -RESIDUAL | .2 | .1 | .1 | .0 | .3 | NA | .0 | .1 |
| OFF HIGHWAY DIESEL | .0 | .0 | .0 | .0 | .1 | .0 | .0 | .0 |
| CEMENT PLANT | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| WILD FIRES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| MISCELLANEOUS | 4.8 | 3.8 | 3.0 | 2.7 | 2.2 | .7 | .6 | .5 |

TABLE 3. SO2 EMISSIONS (1000 TONS) 1900-1945 SOUTH CAROLINA

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | | | |
| ELECTRIC UTILITIES | 1.4 | 2.3 | 3.2 | 4.3 | 6.1 | 9.3 | 9.6 | 6.5 | 9.7 | 13.2 |
| INDUSTRIAL BOILERS | 3.1 | 5.3 | 7.9 | 11.0 | 15.9 | 23.0 | 26.8 | 28.8 | 40.1 | 54.6 |
| COMMERCIAL-RESIDENTIAL | 3.8 | 6.7 | 10.4 | 16.0 | 17.7 | 20.2 | 21.8 | 17.8 | 18.7 | 26.3 |
| ANTHRACITE COAL | | | | | | | | | | |
| ALL USES | .6 | .9 | .9 | 1.0 | 1.0 | .7 | NA | NA | NA | NA |
| RESIDUAL OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .6 | .5 | .4 | .4 | .6 |
| INDUSTRIAL | NA | NA | NA | NA | NA | 1.5 | 1.4 | 1.4 | 2.6 | 3.3 |
| COMMERCIAL | NA | NA | NA | NA | NA | .0 | .0 | .0 | .5 | .3 |
| DISTILLATE OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .1 |
| INDUSTRIAL | NA | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .1 |
| COMMERCIAL-RESIDENTIAL | NA | NA | NA | NA | NA | .0 | .1 | .1 | .3 | .5 |
| NATURAL GAS | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| WOOD | | | | | | | | | | |
| ALL USES | .5 | .5 | .5 | .5 | .4 | .4 | .4 | .4 | .4 | .3 |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE | .0 | .0 | .0 | .0 | .1 | .2 | .3 | .3 | .5 | .5 |
| DIESEL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL | 10.5 | 18.5 | 27.3 | 35.2 | 42.5 | 37.3 | 33.8 | 27.9 | 32.1 | 48.6 |
| -OIL | NA | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .3 |
| COKE PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS FUEL OIL | NA | NA | NA | NA | NA | .6 | .7 | .5 | .8 | .3 |
| CEMENT PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| WILD FIRES | .2 | .2 | .2 | .2 | .2 | .2 | 3.4 | .4 | .8 | .5 |
| MISCELLANEOUS | 11.6 | 12.4 | 13.3 | 13.5 | 13.6 | 14.8 | 15.7 | 15.0 | 14.2 | 15.9 |

TABLE 4. SO2 EMISSIONS (1000 TONS) 1950-1980 SOUTH CAROLINA

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | |
| ELECTRIC UTILITIES | 15.6 | 28.6 | 40.5 | 68.2 | 98.5 | 114.6 | 156.8 | 190.2 |
| INDUSTRIAL BOILERS | 34.0 | 31.8 | 39.0 | 32.7 | 39.3 | 17.2 | 29.2 | 38.7 |
| COMMERCIAL-RESIDENTIAL | 20.9 | 13.2 | 7.2 | 4.9 | 6.3 | 2.6 | .2 | 3.9 |
| ANTHRACITE COAL | | | | | | | | |
| ALL USES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .2 |
| RESIDUAL OIL | | | | | | | | |
| ELECTRIC UTILITIES | 6.7 | 1.1 | .3 | .3 | 21.6 | 28.8 | 34.4 | 12.3 |
| INDUSTRIAL | 12.1 | 15.6 | 12.8 | 9.7 | 7.3 | 14.7 | 41.4 | 27.3 |
| COMMERCIAL | 1.4 | 2.2 | 3.0 | 1.9 | 2.7 | 1.4 | 2.3 | .4 |
| DISTILLATE OIL | | | | | | | | |
| ELECTRIC UTILITIES | .1 | .0 | .0 | .0 | .7 | .0 | .5 | .3 |
| INDUSTRIAL | .2 | .3 | .2 | .1 | .3 | .5 | .6 | .5 |
| COMMERCIAL-RESIDENTIAL | 2.3 | 4.1 | 5.3 | 2.6 | 3.6 | 2.2 | 2.6 | 2.3 |
| NATURAL GAS | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| PIPELINES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| COMMERCIAL-RESIDENTIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| WOOD | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | .0 | .1 | .1 | .1 | .1 | .1 | .1 | .1 |
| COMMERCIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDENTIAL | .5 | .4 | .3 | .2 | .1 | .1 | .1 | .1 |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE | 1.0 | 1.4 | 1.5 | 1.9 | 2.7 | 3.3 | 3.9 | 3.6 |
| DIESEL | .1 | .1 | .2 | .7 | 1.6 | 2.3 | 3.1 | 3.9 |
| OTHER | | | | | | | | |
| RAILROADS-COAL | 26.7 | 8.3 | 1.4 | .0 | .0 | .0 | .0 | .0 |
| -OIL | .6 | .7 | .5 | .5 | .5 | .4 | .6 | .6 |
| COKE PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS-DISTILLATE | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -RESIDUAL | .5 | .6 | 1.0 | .5 | 1.9 | .5 | .8 | 1.1 |
| OFF HIGHWAY DIESEL | .1 | .2 | .3 | .2 | .3 | .3 | .3 | .2 |
| CEMENT PLANT | .9 | 1.8 | 2.5 | 3.1 | 10.4 | 10.9 | 10.8 | 9.9 |
| WILD FIRES | .2 | .1 | .0 | .0 | .0 | .0 | .0 | .0 |
| MISCELLANEOUS | 17.7 | 15.4 | 13.4 | 13.7 | 13.1 | 8.7 | 8.7 | 8.0 |

TABLE 3. SO2 EMISSIONS (1000 TONS) 1900-1945 SOUTH DAKOTA

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | | | |
| ELECTRIC UTILITIES | 2.4 | 4.0 | 5.4 | 7.3 | 7.7 | 6.9 | 6.0 | 4.7 | 8.1 | 12.8 |
| INDUSTRIAL BOILERS | 1.0 | 1.4 | 1.7 | 2.1 | 1.8 | 1.3 | 1.1 | 1.2 | 1.6 | 2.2 |
| COMMERCIAL-RESIDENTIAL | 2.7 | 3.8 | 5.0 | 6.6 | 6.9 | 7.9 | 8.3 | 6.4 | 6.4 | 8.5 |
| ANTHRACITE COAL | | | | | | | | | | |
| ALL USES | 1.8 | 2.5 | 2.7 | 2.8 | 2.8 | 2.1 | NA | NA | NA | NA |
| RESIDUAL OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .3 | .3 | .2 | .3 | .1 |
| INDUSTRIAL | NA | NA | NA | NA | NA | .0 | .0 | .0 | NA | .1 |
| COMMERCIAL | NA | NA | NA | NA | NA | .0 | .1 | .1 | .1 | .0 |
| DISTILLATE OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .1 |
| INDUSTRIAL | NA | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .0 |
| COMMERCIAL-RESIDENTIAL | NA | NA | NA | NA | NA | .0 | .1 | .1 | .3 | .2 |
| NATURAL GAS | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | NA | NA | .0 | .0 | .0 |
| INDUSTRIAL | NA | NA | .0 | NA | .0 | NA | .0 | .0 | .0 | NA |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 | .0 | NA |
| WOOD | | | | | | | | | | |
| ALL USES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE | .0 | .0 | .0 | .0 | .1 | .2 | .2 | .2 | .3 | .2 |
| DIESEL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL | 4.3 | 6.1 | 7.5 | 8.2 | 8.9 | 7.1 | 6.0 | 4.5 | 4.7 | 6.5 |
| -OIL | NA | NA | NA | NA | NA | .1 | .1 | .1 | .1 | .2 |
| COKE PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS FUEL OIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CEMENT PLANTS | .0 | NA | .0 | .0 | .0 | NA | NA | NA | NA | NA |
| WILD FIRES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .1 |
| MISCELLANEOUS | 3.0 | 3.6 | 4.3 | 4.3 | 4.3 | 4.8 | 5.1 | 4.7 | 4.3 | 4.1 |

TABLE 4. SO2 EMISSIONS (1000 TONS) 1950-1980 SOUTH DAKOTA

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | |
| ELECTRIC UTILITIES | 12.7 | 12.2 | 5.3 | 5.1 | 52.9 | 32.0 | 46.4 | 38.2 |
| INDUSTRIAL BOILERS | .8 | .7 | 2.4 | 5.7 | .5 | .7 | 2.4 | 1.7 |
| COMMERCIAL-RESIDENTIAL | 1.9 | 1.2 | 2.7 | 2.1 | .4 | .3 | .0 | .3 |
| ANTHRACITE COAL | | | | | | | | |
| ALL USES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDUAL OIL | | | | | | | | |
| ELECTRIC UTILITIES | .1 | .0 | .0 | .1 | .9 | .4 | .2 | .0 |
| INDUSTRIAL | .5 | .3 | .1 | .0 | .2 | .3 | .3 | .4 |
| COMMERCIAL | .1 | .1 | .2 | .1 | .1 | .0 | .3 | .1 |
| DISTILLATE OIL | | | | | | | | |
| ELECTRIC UTILITIES | .2 | .1 | .0 | .0 | .0 | .1 | .1 | .1 |
| INDUSTRIAL | .1 | .3 | .0 | .1 | .1 | .1 | .1 | .1 |
| COMMERCIAL-RESIDENTIAL | .7 | .8 | 2.9 | 2.5 | 2.3 | 1.5 | .9 | .9 |
| NATURAL GAS | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| PIPELINES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| COMMERCIAL-RESIDENTIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| WOOD | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| COMMERCIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDENTIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE | .5 | .5 | .5 | .6 | .8 | .8 | .9 | 1.0 |
| DIESEL | .1 | .1 | .1 | .2 | .8 | .7 | 1.0 | 1.2 |
| OTHER | | | | | | | | |
| RAILROADS-COAL | 3.5 | 1.1 | .7 | .3 | .1 | .0 | .0 | .0 |
| -OIL | .4 | .6 | .3 | .4 | .3 | .3 | .3 | .3 |
| COKE PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS-DISTILLATE | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -RESIDUAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| OFF HIGHWAY DIESEL | .0 | .1 | .3 | .4 | .2 | .2 | .3 | .1 |
| CEMENT PLANT | 1.2 | 1.6 | 1.8 | 2.0 | 2.7 | 2.9 | 2.6 | 2.4 |
| WILD FIRES | .0 | .0 | .0 | .0 | .1 | .1 | .1 | .1 |
| MISCELLANEOUS | 4.0 | 3.5 | 3.0 | 2.2 | 1.5 | .6 | .6 | .5 |

TABLE 3. SO2 EMISSIONS (1000 TONS) 1900-1945 TENNESSEE

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | | | |
| ELECTRIC UTILITIES | 4.4 | 7.2 | 9.9 | 13.2 | 15.4 | 16.9 | 24.7 | 28.3 | 61.7 | 114.3 |
| INDUSTRIAL BOILERS | 33.1 | 43.8 | 52.4 | 60.0 | 67.4 | 80.1 | 82.3 | 82.2 | 109.1 | 143.8 |
| COMMERCIAL-RESIDENTIAL | 40.2 | 55.6 | 70.1 | 89.0 | 92.0 | 104.9 | 119.1 | 104.6 | 117.9 | 176.9 |
| ANTHRACITE COAL | | | | | | | | | | |
| ALL USES | .1 | .1 | .1 | .1 | .1 | .1 | NA | NA | NA | NA |
| RESIDUAL OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | NA | NA | NA | NA | NA | .6 | .6 | .6 | .4 | 1.2 |
| COMMERCIAL | NA | NA | NA | NA | NA | .1 | .1 | .1 | .1 | 1.3 |
| DISTILLATE OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | NA | NA | NA | NA | NA | .1 | .1 | .1 | .1 | .3 |
| COMMERCIAL-RESIDENTIAL | NA | NA | NA | NA | NA | .1 | .1 | .2 | .3 | .6 |
| NATURAL GAS | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | NA | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| WOOD | | | | | | | | | | |
| ALL USES | .6 | .6 | .6 | .6 | .5 | .5 | .5 | .5 | .5 | .4 |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE | .0 | .0 | .0 | .0 | .1 | .3 | .5 | .7 | .7 | .8 |
| DIESEL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL | 45.8 | 63.1 | 74.7 | 78.6 | 87.7 | 77.0 | 69.9 | 57.6 | 66.4 | 100.4 |
| -OIL | NA | NA | NA | NA | NA | .1 | .1 | .1 | .3 | .7 |
| COKE PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| SMELTERS-COPPER | 4.8 | 15.8 | 19.6 | 19.1 | 15.7 | 19.2 | .0 | 21.9 | 30.9 | 26.1 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS FUEL OIL | NA | NA | NA | NA | NA | .2 | .3 | .2 | 1.3 | 3.3 |
| CEMENT PLANTS | .0 | .0 | NA | NA | NA | NA | NA | NA | NA | NA |
| WILD FIRES | .2 | .2 | .2 | .2 | .2 | .2 | .6 | .3 | .7 | .4 |
| MISCELLANEOUS | 20.2 | 21.3 | 22.5 | 23.1 | 23.5 | 26.0 | 27.9 | 26.7 | 25.3 | 29.8 |

TABLE 4. SO2 EMISSIONS (1000 TONS) 1950-1980 TENNESSEE

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | |
| ELECTRIC UTILITIES | 17.9 | 227.0 | 639.1 | 560.0 | 865.0 | 1349.3 | 891.8 | 1002.6 |
| INDUSTRIAL BOILERS | 89.1 | 83.3 | 59.7 | 114.9 | 71.6 | 43.1 | 161.7 | 97.9 |
| COMMERCIAL-RESIDENTIAL | 147.7 | 92.9 | 32.4 | 22.5 | 15.6 | 3.6 | 1.5 | 5.9 |
| ANTHRACITE COAL | | | | | | | | |
| ALL USES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDUAL OIL | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | 1.3 | 1.2 | .7 | 1.1 | 3.3 | 2.1 | 8.7 | 8.8 |
| COMMERCIAL | 1.6 | .5 | .1 | .0 | .1 | 2.7 | 5.7 | .3 |
| DISTILLATE OIL | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | 1.7 | 4.6 | .4 |
| INDUSTRIAL | .4 | .3 | .4 | .3 | .4 | .9 | 1.6 | 1.5 |
| COMMERCIAL-RESIDENTIAL | 1.9 | 2.4 | 1.6 | 1.2 | 2.7 | 2.7 | 3.2 | 1.3 |
| NATURAL GAS | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| PIPELINES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| COMMERCIAL-RESIDENTIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .1 |
| WOOD | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | .0 | .1 | .1 | .1 | .1 | .1 | .1 | .2 |
| COMMERCIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDENTIAL | .6 | .4 | .3 | .2 | .2 | .2 | .3 | .4 |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE | 1.5 | 2.1 | 2.3 | 2.9 | 3.3 | 5.2 | 6.1 | 5.4 |
| DIESEL | .2 | .2 | .5 | 1.0 | 3.1 | 4.3 | 6.6 | 6.6 |
| OTHER | | | | | | | | |
| RAILROADS-COAL | 55.2 | 17.2 | 3.7 | .0 | .0 | .0 | .0 | .0 |
| -OIL | 1.7 | 2.1 | 2.2 | 2.5 | 2.6 | 2.7 | 3.9 | 3.6 |
| COKE PLANTS | 1.2 | 1.0 | .5 | .5 | .4 | .4 | .6 | .4 |
| SMELTERS-COPPER | .0 | 23.0 | 30.0 | 34.0 | 40.0 | 23.0 | 6.0 | 5.0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS-DISTILLATE | .0 | .0 | .0 | .1 | .2 | .3 | .2 | .2 |
| -RESIDUAL | .6 | .5 | .0 | .0 | .0 | .0 | .0 | .0 |
| OFF HIGHWAY DIESEL | .2 | .3 | .7 | .9 | .7 | 1.1 | 1.2 | .4 |
| CEMENT PLANT | 18.6 | 22.6 | 16.8 | 18.7 | 15.2 | 9.7 | 15.3 | 13.4 |
| WILD FIRES | .4 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| MISCELLANEOUS | 34.8 | 31.6 | 29.1 | 30.5 | 30.6 | 23.4 | 23.9 | 22.2 |

TABLE 3. SO2 EMISSIONS (1000 TONS) 1900-1945 TEXAS

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | | | |
| ELECTRIC UTILITIES | 6.8 | 11.2 | 15.3 | 20.4 | 27.3 | 38.1 | 35.8 | 21.2 | 26.2 | 27.4 |
| INDUSTRIAL BOILERS | 37.5 | 47.5 | 54.1 | 58.4 | 50.6 | 38.8 | 28.5 | 23.6 | 27.0 | 31.5 |
| COMMERCIAL-RESIDENTIAL | 19.2 | 25.5 | 30.6 | 36.7 | 37.0 | 42.2 | 42.5 | 30.3 | 27.3 | 31.9 |
| ANTHRACITE COAL | | | | | | | | | | |
| ALL USES | .2 | .3 | .3 | .3 | .3 | .3 | NA | NA | NA | NA |
| RESIDUAL OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | 1.8 | 1.4 | 1.3 | .8 | 1.4 |
| INDUSTRIAL | NA | NA | NA | NA | NA | 54.8 | 52.4 | 51.9 | 56.2 | 54.0 |
| COMMERCIAL | NA | NA | NA | NA | NA | 1.4 | 2.4 | 3.8 | 11.6 | 132.5 |
| DISTILLATE OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | NA | NA | NA | NA | NA | .1 | .1 | .1 | .1 | .8 |
| COMMERCIAL-RESIDENTIAL | NA | NA | NA | NA | NA | .2 | .3 | .4 | .7 | 17.1 |
| NATURAL GAS | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | NA | NA | NA | .0 | .0 | .0 | .1 | .1 | .2 | .4 |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| WOOD | | | | | | | | | | |
| ALL USES | .4 | .4 | .4 | .4 | .3 | .3 | .3 | .3 | .3 | .3 |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE | .0 | .0 | .0 | .1 | .5 | 1.1 | 1.8 | 2.1 | 2.9 | 2.8 |
| DIESEL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL | 144.2 | 190.2 | 214.4 | 212.4 | 218.8 | 176.0 | 146.6 | 111.0 | 116.5 | 158.7 |
| -OIL | NA | NA | NA | NA | NA | 25.0 | 23.5 | 19.3 | 18.1 | 37.2 |
| COKE PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .2 | .0 | .1 | .1 |
| -LEAD | .0 | .4 | .6 | .7 | .3 | 1.0 | 3.1 | 2.1 | 1.2 | 2.3 |
| -ZINC | .8 | 4.9 | 10.6 | 20.2 | 10.3 | 31.1 | 11.4 | 8.6 | 11.0 | 21.6 |
| VESSELS FUEL OIL | NA | NA | NA | NA | NA | 85.8 | 101.9 | 80.7 | 73.3 | 103.1 |
| CEMENT PLANTS | .0 | NA | NA | 1.9 | 2.5 | 4.8 | 6.7 | 3.8 | 7.3 | 8.0 |
| WILD FIRES | .4 | .4 | .4 | .4 | .4 | .4 | 1.3 | .3 | .6 | .4 |
| MISCELLANEOUS | 179.4 | 198.3 | 219.3 | 236.1 | 248.3 | 275.6 | 297.1 | 299.0 | 301.2 | 392.6 |

TABLE 4. SO2 EMISSIONS (1000 TONS) 1950-1980 TEXAS

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | 75.2 | 174.2 | 294.3 |
| INDUSTRIAL BOILERS | .0 | 48.4 | 49.0 | 18.6 | .5 | 57.0 | 45.9 | 64.8 |
| COMMERCIAL-RESIDENTIAL | 6.2 | 3.9 | 2.3 | .8 | .3 | .0 | .0 | .0 |
| ANTHRACITE COAL | | | | | | | | |
| ALL USES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDUAL OIL | | | | | | | | |
| ELECTRIC UTILITIES | .2 | .1 | .1 | .0 | 1.0 | 8.1 | 6.3 | 1.4 |
| INDUSTRIAL | 23.1 | 29.3 | 21.6 | 7.9 | 10.5 | 38.7 | 85.3 | 90.2 |
| COMMERCIAL | 12.7 | 20.0 | 1.8 | .3 | 5.6 | 32.9 | 30.4 | .0 |
| DISTILLATE OIL | | | | | | | | |
| ELECTRIC UTILITIES | .1 | .1 | .0 | .0 | .1 | 1.4 | 1.7 | 1.5 |
| INDUSTRIAL | 3.3 | 3.6 | 3.8 | 2.5 | 2.7 | 4.2 | 8.5 | 7.3 |
| COMMERCIAL-RESIDENTIAL | 5.1 | 9.2 | 2.5 | 1.3 | 8.8 | 11.3 | 14.7 | 9.5 |
| NATURAL GAS | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .1 | .1 | .2 | .3 | .4 | .4 | .4 |
| INDUSTRIAL | .5 | .6 | .6 | .6 | .5 | .4 | .4 | .5 |
| PIPELINES | .0 | .0 | .2 | .2 | .3 | .3 | .2 | .2 |
| COMMERCIAL-RESIDENTIAL | .0 | .1 | .1 | .1 | .1 | .1 | .1 | .2 |
| WOOD | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | .1 | .1 | .1 | .1 | .1 | .2 | .2 | .2 |
| COMMERCIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDENTIAL | .3 | .2 | .2 | .1 | .1 | .1 | .1 | .1 |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE | 5.7 | 7.4 | 7.6 | 9.6 | 10.9 | 13.1 | 17.4 | 17.7 |
| DIESEL | 1.4 | 1.4 | 2.1 | 3.7 | 7.9 | 12.4 | 18.3 | 20.5 |
| OTHER | | | | | | | | |
| RAILROADS-COAL | 86.5 | 28.1 | 4.9 | 2.4 | 1.4 | .0 | .0 | .0 |
| -OIL | 23.4 | 9.3 | 9.5 | 8.0 | 8.9 | 14.4 | 13.3 | 9.4 |
| COKE PLANTS | 3.8 | 4.1 | .0 | 2.3 | 2.3 | 2.2 | .9 | 1.9 |
| SMELTERS-COPPER | NA | NA | NA | NA | NA | 48.0 | 66.0 | 57.0 |
| -LEAD | 1.3 | 1.0 | .6 | 3.9 | 50.2 | 13.4 | 12.3 | 8.0 |
| -ZINC | 80.2 | 134.7 | 92.2 | 48.8 | 30.6 | 14.7 | 13.4 | 6.2 |
| VESSELS-DISTILLATE | .3 | .4 | .3 | .2 | .4 | .7 | .9 | .9 |
| -RESIDUAL | 31.9 | 34.3 | 21.2 | 14.9 | 15.0 | 31.4 | 50.2 | 59.9 |
| OFF HIGHWAY DIESEL | .6 | .8 | 2.6 | 2.7 | 2.0 | 2.8 | 4.0 | 2.9 |
| CEMENT PLANT | 17.0 | 24.0 | 23.0 | 30.5 | 34.0 | 36.1 | 44.0 | 47.8 |
| WILD FIRES | .3 | .0 | .1 | .0 | .0 | .0 | 1.3 | .0 |
| MISCELLANEOUS | 486.1 | 519.0 | 553.6 | 613.0 | 665.5 | 615.5 | 645.0 | 609.0 |

TABLE 3. SO2 EMISSIONS (1000 TONS) 1900-1945 UTAH

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .1 | .1 | .1 | .2 | .2 | .4 | .5 | 1.0 | 1.9 |
| INDUSTRIAL BOILERS | 3.7 | 5.5 | 7.4 | 9.5 | 11.0 | 12.9 | 11.6 | 9.8 | 11.4 | 13.5 |
| COMMERCIAL-RESIDENTIAL | 6.1 | 9.5 | 13.5 | 19.1 | 20.6 | 23.4 | 24.4 | 18.6 | 18.1 | 23.6 |
| ANTHRACITE COAL | | | | | | | | | | |
| ALL USES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDUAL OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .0 | .0 | .0 | .0 | NA |
| INDUSTRIAL | NA | NA | NA | NA | NA | 1.0 | .9 | .9 | .9 | 1.4 |
| COMMERCIAL | NA | NA | NA | NA | NA | .0 | .0 | .0 | .1 | .0 |
| DISTILLATE OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | NA | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .0 |
| COMMERCIAL-RESIDENTIAL | NA | NA | NA | NA | NA | .0 | .1 | .1 | .1 | .5 |
| NATURAL GAS | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | NA | NA | NA | NA | .0 |
| INDUSTRIAL | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| WOOD | | | | | | | | | | |
| ALL USES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE | .0 | .0 | .0 | .0 | .0 | .1 | .1 | .2 | .2 | .2 |
| DIESEL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL | 5.8 | 8.9 | 11.9 | 14.1 | 15.7 | 12.6 | 10.5 | 7.9 | 8.3 | 11.4 |
| -OIL | NA | NA | NA | NA | NA | .4 | .4 | .3 | .3 | .7 |
| COKE PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| SMELTERS-COPPER | 18.2 | 56.5 | 133.5 | 178.7 | 103.5 | 235.9 | 187.2 | 127.1 | 541.3 | 477.3 |
| -LEAD | 14.3 | 13.4 | 18.0 | 31.6 | 19.0 | 45.6 | 34.4 | 20.8 | 22.5 | 12.1 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS FUEL OIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CEMENT PLANTS | .1 | NA | .9 | .7 | 1.2 | NA | NA | NA | NA | NA |
| WILD FIRES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| MISCELLANEOUS | 12.9 | 14.3 | 15.9 | 17.1 | 17.9 | 19.8 | 21.3 | 21.4 | 21.6 | 28.0 |

TABLE 4. SO2 EMISSIONS (1000 TONS) 1950-1980 UTAH

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | |
| ELECTRIC UTILITIES | 2.3 | 6.5 | 10.0 | 7.1 | 5.0 | 19.5 | 25.4 | 27.6 |
| INDUSTRIAL BOILERS | 27.9 | 26.1 | 7.7 | 3.3 | 5.0 | 5.3 | 9.3 | 5.0 |
| COMMERCIAL-RESIDENTIAL | 11.8 | 7.4 | 4.7 | 3.4 | 1.2 | .9 | .8 | 2.6 |
| ANTHRACITE COAL | | | | | | | | |
| ALL USES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDUAL OIL | | | | | | | | |
| ELECTRIC UTILITIES | .0 | 2.8 | 6.5 | 4.6 | 5.2 | .1 | .1 | .0 |
| INDUSTRIAL | 20.3 | 19.2 | 16.9 | 18.9 | 15.0 | 16.6 | 16.4 | 12.3 |
| COMMERCIAL | .1 | .4 | 3.0 | 3.5 | 4.9 | 4.4 | 5.5 | 5.5 |
| DISTILLATE OIL | | | | | | | | |
| ELECTRIC UTILITIES | .1 | .1 | .1 | .0 | .0 | .0 | .1 | .1 |
| INDUSTRIAL | .1 | .3 | .3 | .2 | .3 | 1.5 | 1.7 | .8 |
| COMMERCIAL-RESIDENTIAL | .4 | 1.1 | 1.1 | 1.1 | .8 | 2.2 | 1.7 | 1.0 |
| NATURAL GAS | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| PIPELINES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| COMMERCIAL-RESIDENTIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| WOOD | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| COMMERCIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDENTIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .1 |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE | .5 | .6 | .7 | .8 | 1.0 | 1.3 | 1.6 | 1.7 |
| DIESEL | .3 | .3 | .4 | .7 | 1.2 | 1.3 | 1.5 | 1.9 |
| OTHER | | | | | | | | |
| RAILROADS-COAL | 6.2 | 2.0 | .5 | .2 | .1 | .0 | .0 | .0 |
| -OIL | 3.3 | 2.4 | 2.4 | 2.0 | 2.1 | 2.6 | 2.4 | 2.8 |
| COKE PLANTS | 2.2 | 2.8 | 4.0 | 3.3 | 3.4 | 3.5 | 2.7 | 2.5 |
| SMELTERS-COPPER | 473.2 | 280.3 | 167.4 | 218.4 | 189.3 | 10.0 | 4.0 | 4.0 |
| -LEAD | 13.3 | 15.0 | 11.7 | 75.2 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS-DISTILLATE | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -RESIDUAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| OFF HIGHWAY DIESEL | .1 | .2 | .2 | .3 | .4 | .5 | .5 | .5 |
| CEMENT PLANT | 1.3 | 1.7 | 2.1 | 2.2 | 2.3 | 2.9 | 3.4 | 3.1 |
| WILD FIRES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| MISCELLANEOUS | 34.5 | 36.5 | 38.7 | 43.0 | 46.6 | 42.7 | 44.7 | 42.1 |

TABLE 3. SO2 EMISSIONS (1000 TONS) 1900-1945 VERMONT

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | | | |
| ELECTRIC UTILITIES | .9 | 1.5 | 2.0 | 2.7 | 3.0 | 3.2 | 2.7 | 1.7 | 2.3 | 2.7 |
| INDUSTRIAL BOILERS | 6.1 | 8.4 | 10.5 | 12.6 | 12.7 | 12.2 | 9.5 | 7.2 | 7.5 | 7.8 |
| COMMERCIAL-RESIDENTIAL | .9 | 1.3 | 1.8 | 2.3 | 2.5 | 2.8 | 3.1 | 2.5 | 2.7 | 3.8 |
| ANTHRACITE COAL | | | | | | | | | | |
| ALL USES | 20.0 | 27.1 | 29.3 | 30.7 | 31.0 | 23.1 | 8.0 | 6.1 | 10.1 | 10.8 |
| RESIDUAL OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | NA | NA | NA | NA | NA | .2 | .2 | .2 | .4 | .3 |
| COMMERCIAL | NA | NA | NA | NA | NA | .0 | .0 | .0 | NA | NA |
| DISTILLATE OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | NA | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .0 |
| COMMERCIAL-RESIDENTIAL | NA | NA | NA | NA | NA | .2 | .3 | .5 | .6 | .4 |
| NATURAL GAS | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| WOOD | | | | | | | | | | |
| ALL USES | .1 | .1 | .1 | .1 | .1 | .1 | .1 | .1 | .1 | .1 |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE | .0 | .0 | .0 | .0 | .0 | .1 | .1 | .1 | .2 | .1 |
| DIESEL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL | 4.0 | 5.7 | 7.1 | 7.8 | 8.6 | 7.1 | 6.1 | 4.8 | 5.4 | 8.0 |
| -OIL | NA | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .0 |
| COKE PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS FUEL OIL | NA | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .0 |
| CEMENT PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | NA |
| WILD FIRES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| MISCELLANEOUS | 2.6 | 2.6 | 2.6 | 2.6 | 2.6 | 2.7 | 2.7 | 2.7 | 2.7 | 2.5 |

TABLE 4. SO2 EMISSIONS (1000 TONS) 1950-1980 VERMONT

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | |
| ELECTRIC UTILITIES | .0 | 1.6 | .8 | 1.6 | 3.3 | .3 | .0 | .0 |
| INDUSTRIAL BOILERS | .0 | .3 | .6 | .0 | .0 | .0 | .0 | .1 |
| COMMERCIAL-RESIDENTIAL | .1 | .1 | .1 | .1 | .0 | .0 | .0 | .3 |
| ANTHRACITE COAL | | | | | | | | |
| ALL USES | 3.7 | 2.3 | .5 | .2 | .3 | .1 | .1 | .2 |
| RESIDUAL OIL | | | | | | | | |
| ELECTRIC UTILITIES | .1 | .1 | .0 | .1 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | 1.1 | .9 | 1.5 | 1.5 | 2.2 | .9 | 1.7 | 1.2 |
| COMMERCIAL | .0 | .0 | .6 | 2.6 | 1.8 | 1.0 | 2.6 | 1.2 |
| DISTILLATE OIL | | | | | | | | |
| ELECTRIC UTILITIES | .1 | .0 | .0 | .0 | .2 | .1 | .0 | .0 |
| INDUSTRIAL | .1 | .1 | .1 | .1 | .1 | .1 | .1 | .1 |
| COMMERCIAL-RESIDENTIAL | .8 | .6 | 2.5 | 3.4 | 3.4 | 2.5 | 2.9 | 2.0 |
| NATURAL GAS | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| PIPELINES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| COMMERCIAL-RESIDENTIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| WOOD | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| COMMERCIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDENTIAL | .1 | .1 | .0 | .0 | .0 | .0 | .1 | .1 |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE | .2 | .3 | .3 | .3 | .4 | .5 | .6 | .6 |
| DIESEL | .0 | .0 | .0 | .1 | .2 | .3 | .4 | .5 |
| OTHER | | | | | | | | |
| RAILROADS-COAL | 3.4 | .7 | .1 | .0 | .0 | .0 | .0 | .0 |
| -OIL | .1 | .1 | .2 | .1 | .1 | .0 | .1 | .1 |
| COKE PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS-DISTILLATE | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -RESIDUAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| OFF HIGHWAY DIESEL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .1 |
| CEMENT PLANT | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| WILD FIRES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| MISCELLANEOUS | 2.3 | 1.9 | 1.6 | 1.4 | 1.1 | .4 | .4 | .3 |

TABLE 3. SO2 EMISSIONS (1000 TONS) 1900-1945 VIRGINIA

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | | | |
| ELECTRIC UTILITIES | 4.5 | 7.4 | 10.1 | 13.5 | 16.7 | 20.5 | 21.6 | 17.0 | 29.2 | 45.7 |
| INDUSTRIAL BOILERS | 21.4 | 32.4 | 44.1 | 57.2 | 60.3 | 60.3 | 60.2 | 62.6 | 85.2 | 114.5 |
| COMMERCIAL-RESIDENTIAL | 8.1 | 12.8 | 18.3 | 26.2 | 28.4 | 32.3 | 41.6 | 42.9 | 54.6 | 90.1 |
| ANTHRACITE COAL | | | | | | | | | | |
| ALL USES | 1.7 | 2.3 | 2.5 | 2.7 | 2.7 | 2.0 | 1.3 | 1.0 | 1.7 | 2.0 |
| RESIDUAL OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | 2.2 | 1.7 | 1.5 | .8 | 1.3 |
| INDUSTRIAL | NA | NA | NA | NA | NA | 1.3 | 1.2 | 1.2 | 1.8 | 1.7 |
| COMMERCIAL | NA | NA | NA | NA | NA | .8 | 1.4 | 2.2 | 3.3 | 2.6 |
| DISTILLATE OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .1 | .1 | .1 | .2 | .3 |
| INDUSTRIAL | NA | NA | NA | NA | NA | .1 | .1 | .1 | .1 | .2 |
| COMMERCIAL-RESIDENTIAL | NA | NA | NA | NA | NA | .1 | .1 | .2 | .4 | .8 |
| NATURAL GAS | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | .0 | .0 | .0 | NA | NA | NA |
| INDUSTRIAL | NA | NA | .0 | .0 | .0 | .0 | .0 | NA | NA | NA |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | .0 | .0 | .0 | .0 | .0 | NA | NA | NA |
| WOOD | | | | | | | | | | |
| ALL USES | .7 | .6 | .6 | .6 | .6 | .5 | .5 | .5 | .5 | .4 |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE | .0 | .0 | .0 | .0 | .1 | .3 | .5 | .7 | 1.0 | .9 |
| DIESEL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL | 36.5 | 57.4 | 77.5 | 92.7 | 109.1 | 95.7 | 86.8 | 71.5 | 82.5 | 124.7 |
| -OIL | NA | NA | NA | NA | NA | .1 | .1 | .1 | .1 | .4 |
| COKE PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS FUEL OIL | NA | NA | NA | NA | NA | 9.0 | 10.7 | 8.5 | 8.9 | 26.4 |
| CEMENT PLANTS | .1 | 1.8 | NA | NA | NA | NA | NA | NA | NA | NA |
| WILD FIRES | .1 | .1 | .1 | .1 | .1 | 1 | .6 | .0 | .0 | .0 |
| MISCELLANEOUS | 19.4 | 20.7 | 22.2 | 22.8 | 23.2 | 25.4 | 27.2 | 26.2 | 25.2 | 30.4 |

TABLE 4. SO2 EMISSIONS (1000 TONS) 1950-1980 VIRGINIA

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | |
| ELECTRIC UTILITIES | 77.2 | 95.9 | 158.7 | 209.5 | 143.0 | 64.8 | 88.6 | 94.9 |
| INDUSTRIAL BOILERS | 100.2 | 93.7 | 80.9 | 92.8 | 88.6 | 40.1 | 40.9 | 65.5 |
| COMMERCIAL-RESIDENTIAL | 47.9 | 30.2 | 27.8 | 17.0 | 11.9 | 3.3 | 1.0 | 3.7 |
| ANTHRACITE COAL | | | | | | | | |
| ALL USES | 1.7 | 1.0 | .3 | .6 | .2 | .5 | .6 | .2 |
| RESIDUAL OIL | | | | | | | | |
| ELECTRIC UTILITIES | 4.0 | .6 | 1.0 | 1.4 | 135.5 | 156.4 | 133.0 | 63.9 |
| INDUSTRIAL | 6.8 | 7.5 | 12.2 | 15.3 | 10.3 | 30.8 | 26.6 | 25.5 |
| COMMERCIAL | 32.6 | 27.1 | 13.5 | 15.7 | 45.6 | 25.5 | 16.9 | 2.9 |
| DISTILLATE OIL | | | | | | | | |
| ELECTRIC UTILITIES | .3 | .0 | .1 | .0 | .6 | 1.5 | 1.5 | .5 |
| INDUSTRIAL | .3 | .4 | .7 | .7 | .8 | 1.5 | 2.0 | 1.4 |
| COMMERCIAL-RESIDENTIAL | .3 | 4.5 | 10.1 | 11.1 | 11.7 | 8.1 | 8.7 | 7.2 |
| NATURAL GAS | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| PIPELINES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| COMMERCIAL-RESIDENTIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .1 |
| WOOD | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | .1 | .1 | .1 | .1 | .1 | .1 | .1 | .1 |
| COMMERCIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDENTIAL | .6 | .5 | .4 | .3 | .2 | .2 | .3 | .5 |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE | 1.8 | 2.5 | 2.7 | 3.3 | 4.6 | 5.5 | 6.3 | 6.2 |
| DIESEL | .3 | .4 | .7 | 2.3 | 2.9 | 3.8 | 4.3 | 5.4 |
| OTHER | | | | | | | | |
| RAILROADS-COAL | 68.5 | 21.3 | 3.9 | .0 | .0 | .0 | .0 | .0 |
| -OIL | 1.5 | 2.1 | 2.0 | 2.9 | 3.8 | 2.5 | 2.8 | 3.2 |
| COKE PLANTS | .0 | 1.0 | .8 | 1.4 | .1 | .0 | .9 | 1.2 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS-DISTILLATE | .0 | .1 | .1 | .1 | .1 | .1 | .1 | .1 |
| -RESIDUAL | 4.6 | 10.7 | 5.6 | 3.2 | 4.8 | 3.0 | 2.2 | 5.7 |
| OFF HIGHWAY DIESEL | .1 | .2 | .3 | .6 | .8 | .5 | .6 | .6 |
| CEMENT PLANT | 3.1 | 6.1 | 8.4 | 10.4 | .4 | .3 | .8 | .7 |
| WILD FIRES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| MISCELLANEOUS | 36.2 | 32.6 | 29.7 | 33.3 | 34.1 | 25.4 | 25.7 | 23.8 |

TABLE 3. SO2 EMISSIONS (1000 TONS) 1900-1945 WASHINGTON

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | | | |
| ELECTRIC UTILITIES | .6 | 1.0 | 1.4 | 1.8 | 1.6 | .7 | .1 | .1 | .1 | .1 |
| INDUSTRIAL BOILERS | 3.0 | 4.5 | 6.2 | 8.0 | 8.1 | 7.5 | 6.7 | 6.4 | 8.2 | 10.5 |
| COMMERCIAL-RESIDENTIAL | 4.0 | 6.4 | 9.1 | 13.0 | 14.1 | 16.1 | 16.6 | 12.4 | 11.9 | 15.0 |
| ANTHRACITE COAL | | | | | | | | | | |
| ALL USES | .0 | .0 | .0 | .0 | .0 | .0 | NA | NA | NA | NA |
| RESIDUAL OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .4 | .3 | .3 | .2 | .3 |
| INDUSTRIAL | NA | NA | NA | NA | NA | 17.7 | 17.0 | 16.8 | 14.0 | 31.7 |
| COMMERCIAL | NA | NA | NA | NA | NA | .8 | 1.3 | 2.1 | 2.5 | 9.4 |
| DISTILLATE OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .1 | .1 | .1 | .0 | .1 |
| INDUSTRIAL | NA | NA | NA | NA | NA | .0 | .0 | .0 | .2 | .3 |
| COMMERCIAL-RESIDENTIAL | NA | NA | NA | NA | NA | .2 | .3 | .5 | .6 | 2.0 |
| NATURAL GAS | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | .0 | .0 | .0 | .0 | NA | NA | NA | NA |
| WOOD | | | | | | | | | | |
| ALL USES | .6 | .6 | .5 | .5 | .5 | .5 | .4 | .4 | .4 | .4 |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE | .0 | .0 | .0 | .0 | .2 | .4 | .6 | .6 | .9 | .9 |
| DIESEL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL | 19.7 | 31.0 | 41.8 | 50.0 | 55.8 | 44.8 | 37.4 | 28.3 | 29.7 | 40.5 |
| -OIL | NA | NA | NA | NA | NA | 3.3 | 3.1 | 2.5 | 1.3 | 2.4 |
| COKE PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| SMELTERS-COPPER | .0 | .2 | .1 | .9 | 2.0 | 1.2 | 1.3 | .1 | 22.9 | 12.3 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS FUEL OIL | NA | NA | NA | NA | NA | 12.6 | 15.0 | 11.8 | 6.1 | 17.2 |
| CEMENT PLANTS | .0 | NA | NA | 1.9 | 2.8 | 3.1 | NA | NA | NA | NA |
| WILD FIRES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| MISCELLANEOUS | 8.2 | 10.9 | 13.8 | 14.2 | 14.6 | 16.9 | 18.7 | 17.5 | 16.1 | 21.1 |

TABLE 4. SO2 EMISSIONS (1000 TONS) 1950-1980 WASHINGTON

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | 37.0 | 89.9 | 81.2 |
| INDUSTRIAL BOILERS | 4.9 | 4.6 | .0 | .0 | 2.5 | 4.6 | 7.0 | 4.6 |
| COMMERCIAL-RESIDENTIAL | 9.8 | 6.1 | 3.5 | 2.8 | .4 | .2 | .5 | 1.7 |
| ANTHRACITE COAL | | | | | | | | |
| ALL USES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDUAL OIL | | | | | | | | |
| ELECTRIC UTILITIES | .4 | .5 | .0 | .0 | .0 | .0 | .0 | 1.2 |
| INDUSTRIAL | 37.1 | 58.4 | 22.6 | 16.2 | 25.3 | 22.5 | 25.7 | 32.7 |
| COMMERCIAL | 2.7 | 5.2 | 21.8 | 18.5 | 24.7 | 12.5 | 8.6 | 14.0 |
| DISTILLATE OIL | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .1 |
| INDUSTRIAL | .7 | 1.1 | 1.1 | .8 | 1.0 | 1.9 | 2.5 | 1.3 |
| COMMERCIAL-RESIDENTIAL | 2.1 | 2.8 | 19.2 | 11.1 | 8.1 | 6.7 | 5.6 | 4.3 |
| NATURAL GAS | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| PIPELINES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| COMMERCIAL-RESIDENTIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .1 |
| WOOD | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | .1 | .1 | .1 | .2 | .2 | .2 | .2 | .2 |
| COMMERCIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDENTIAL | .4 | .3 | .2 | .2 | .1 | .1 | .2 | .2 |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE | 1.5 | 1.9 | 1.9 | 2.3 | 3.3 | 3.8 | 4.7 | 4.6 |
| DIESEL | .5 | .4 | .5 | .7 | 1.9 | 2.2 | 3.6 | 4.0 |
| OTHER | | | | | | | | |
| RAILROADS-COAL | 22.0 | 7.2 | .0 | .0 | .2 | .0 | .0 | .0 |
| -OIL | 3.1 | 1.8 | 1.6 | 1.8 | .7 | 2.2 | 3.1 | 2.3 |
| COKE PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| SMELTERS-COPPER | 79.0 | 79.0 | 70.0 | 70.0 | 70.0 | 67.0 | 101.0 | 68.0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS-DISTILLATE | .1 | .1 | .1 | .1 | .1 | .1 | .2 | .2 |
| -RESIDUAL | 2.1 | 1.9 | 2.1 | 1.6 | 1.9 | 2.6 | 7.4 | 10.4 |
| OFF HIGHWAY DIESEL | .5 | .7 | 1.1 | 1.2 | .4 | .4 | .8 | .8 |
| CEMENT PLANT | 6.2 | 6.9 | 7.5 | 7.2 | 8.0 | 8.7 | 11.7 | 9.8 |
| WILD FIRES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| MISCELLANEOUS | 26.8 | 23.8 | 21.6 | 24.9 | 25.8 | 19.2 | 19.4 | 17.9 |

TABLE 3. SO2 EMISSIONS (1000 TONS) 1900-1945 WEST VIRGINIA

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | | | |
| ELECTRIC UTILITIES | 4.6 | 7.6 | 10.3 | 13.8 | 25.5 | 49.6 | 56.9 | 40.9 | 64.8 | 94.1 |
| INDUSTRIAL BOILERS | 31.7 | 51.0 | 72.9 | 93.5 | 106.6 | 108.6 | 96.0 | 85.1 | 103.2 | 126.8 |
| COMMERCIAL-RESIDENTIAL | 3.9 | 6.6 | 9.9 | 14.7 | 16.2 | 18.4 | 19.9 | 16.1 | 16.8 | 23.4 |
| ANTHRACITE COAL | | | | | | | | | | |
| ALL USES | .4 | .5 | .5 | .5 | .6 | .4 | NA | NA | NA | NA |
| RESIDUAL OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .3 | .2 | .2 | .2 | .4 |
| INDUSTRIAL | NA | NA | NA | NA | NA | 3.4 | 3.2 | 3.2 | 4.3 | 3.5 |
| COMMERCIAL | NA | NA | NA | NA | NA | .0 | .1 | .1 | .0 | .4 |
| DISTILLATE OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | NA | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .1 |
| COMMERCIAL-RESIDENTIAL | NA | NA | NA | NA | NA | .0 | .0 | .1 | .1 | .2 |
| NATURAL GAS | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| WOOD | | | | | | | | | | |
| ALL USES | .2 | .2 | .2 | .1 | .1 | .1 | .1 | .1 | .1 | .1 |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE | .0 | .0 | .0 | .0 | .1 | .2 | .3 | .4 | .5 | .5 |
| DIESEL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL | 25.7 | 42.9 | 60.9 | 76.1 | 90.8 | 79.7 | 72.3 | 59.5 | 68.7 | 103.9 |
| -OIL | NA | NA | NA | NA | NA | .0 | .0 | .0 | .1 | .0 |
| COKE PLANTS | .0 | .1 | .1 | .1 | .1 | .1 | .1 | .1 | .1 | .1 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | 1.1 | 6.9 | 14.8 | 28.3 | 14.5 | 43.7 | 16.0 | 12.1 | .0 | .0 |
| VESSELS FUEL OIL | NA | NA | NA | NA | NA | .0 | .0 | .0 | .1 | .4 |
| CEMENT PLANTS | .0 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| WILD FIRES | .1 | .1 | .1 | .1 | .1 | .1 | .3 | .0 | .0 | .0 |
| MISCELLANEOUS | 16.3 | 18.2 | 20.2 | 21.2 | 21.9 | 25.2 | 27.7 | 26.5 | 25.1 | 31.4 |

TABLE 4. SO2 EMISSIONS (1000 TONS) 1950-1980 WEST VIRGINIA

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | |
| ELECTRIC UTILITIES | 130.7 | 210.6 | 321.0 | 438.2 | 746.3 | 1299.8 | 1091.2 | 1059.1 |
| INDUSTRIAL BOILERS | 97.1 | 90.8 | 86.0 | 251.7 | 135.9 | 105.6 | 90.3 | 73.6 |
| COMMERCIAL-RESIDENTIAL | 15.7 | 9.9 | 8.5 | 8.5 | 5.1 | 3.0 | 2.7 | 5.2 |
| ANTHRACITE COAL | | | | | | | | |
| ALL USES | .0 | .0 | .0 | .0 | .0 | .5 | .2 | .1 |
| RESIDUAL OIL | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .1 | .4 | .0 | .1 | .0 |
| INDUSTRIAL | 7.0 | 6.1 | 6.0 | 9.1 | 4.8 | 4.4 | 8.1 | 7.3 |
| COMMERCIAL | .0 | .0 | .4 | .4 | 40.6 | 2.7 | 4.2 | .0 |
| DISTILLATE OIL | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .6 | 1.3 | .6 |
| INDUSTRIAL | .1 | .1 | .2 | .3 | .3 | .5 | .5 | 1.4 |
| COMMERCIAL-RESIDENTIAL | .4 | .5 | .4 | .6 | .4 | .8 | 1.0 | 1.3 |
| NATURAL GAS | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| PIPELINES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| COMMERCIAL-RESIDENTIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .1 |
| WOOD | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| COMMERCIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDENTIAL | .2 | .1 | .1 | .1 | .1 | .1 | .1 | .2 |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE | .9 | 1.0 | 1.0 | 1.2 | 1.3 | 1.7 | 1.8 | 1.7 |
| DIESEL | .2 | .2 | .4 | .5 | 1.7 | 1.3 | 1.4 | 2.1 |
| OTHER | | | | | | | | |
| RAILROADS-COAL | 57.1 | 17.7 | 4.5 | .0 | .0 | .0 | .0 | .0 |
| -OIL | .1 | .6 | 1.3 | .8 | 1.2 | 1.3 | 1.9 | 2.1 |
| COKE PLANTS | 21.6 | 28.6 | 12.2 | 15.9 | 13.8 | 13.9 | 9.3 | 8.9 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS-DISTILLATE | .0 | .0 | .0 | .0 | .0 | .1 | .1 | .0 |
| -RESIDUAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| OFF HIGHWAY DIESEL | .0 | .0 | .0 | .1 | .2 | .2 | .6 | .7 |
| CEMENT PLANT | 1.7 | 1.9 | 3.0 | 3.5 | 3.7 | 3.2 | 3.9 | 3.7 |
| WILD FIRES | .1 | .0 | .0 | .1 | .0 | .0 | .0 | .0 |
| MISCELLANEOUS | 38.0 | 38.1 | 38.6 | 40.0 | 41.7 | 37.2 | 38.9 | 36.7 |

TABLE 3. SO2 EMISSIONS (1000 TONS) 1900-1945 WISCONSIN

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | | | |
| ELECTRIC UTILITIES | 12.8 | 21.1 | 28.9 | 38.6 | 44.8 | 49.1 | 49.1 | 38.8 | 66.9 | 105.4 |
| INDUSTRIAL BOILERS | 80.3 | 111.4 | 140.2 | 169.2 | 214.4 | 287.3 | 268.8 | 225.5 | 260.1 | 306.1 |
| COMMERCIAL-RESIDENTIAL | 44.1 | 64.1 | 84.8 | 113.3 | 119.5 | 136.3 | 145.6 | 115.9 | 118.9 | 163.1 |
| ANTHRACITE COAL | | | | | | | | | | |
| ALL USES | 17.6 | 23.9 | 25.7 | 27.0 | 27.2 | 20.3 | 4.3 | 3.3 | 5.4 | 7.3 |
| RESIDUAL OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | 1.5 | 1.2 | 1.1 | 1.1 | 2.1 |
| INDUSTRIAL | NA | NA | NA | NA | NA | 2.3 | 2.2 | 2.2 | 1.9 | 2.9 |
| COMMERCIAL | NA | NA | NA | NA | NA | .1 | .1 | .2 | .2 | .1 |
| DISTILLATE OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .1 | .0 | .0 | .1 | .1 |
| INDUSTRIAL | NA | NA | NA | NA | NA | .2 | .2 | .2 | .3 | .5 |
| COMMERCIAL-RESIDENTIAL | NA | NA | NA | NA | NA | .1 | .1 | .2 | .4 | .6 |
| NATURAL GAS | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| WOOD | | | | | | | | | | |
| ALL USES | .5 | .4 | .4 | .4 | .4 | .4 | .3 | .3 | .3 | .3 |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE | .0 | .0 | .0 | .1 | .3 | .6 | 1.0 | 1.0 | 1.3 | 1.2 |
| DIESEL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL | 78.2 | 112.9 | 140.7 | 156.2 | 169.1 | 136.1 | 113.3 | 85.9 | 90.1 | 122.8 |
| -OIL | NA | NA | NA | NA | NA | .1 | .1 | .0 | .1 | .3 |
| COKE PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS FUEL OIL | NA | NA | NA | NA | NA | NA | NA | NA | .0 | .0 |
| CEMENT PLANTS | .0 | .0 | .0 | .0 | NA | NA | NA | NA | NA | NA |
| WILD FIRES | .3 | .3 | .3 | .3 | .3 | .3 | .4 | .0 | .0 | .0 |
| MISCELLANEOUS | 21.9 | 23.6 | 25.3 | 26.0 | 26.6 | 29.9 | 32.5 | 30.8 | 28.8 | 33.9 |

TABLE 4. SO2 EMISSIONS (1000 TONS) 1950-1980 WISCONSIN

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | |
| ELECTRIC UTILITIES | 162.8 | 228.3 | 273.5 | 352.7 | 603.3 | 552.5 | 588.0 | 522.9 |
| INDUSTRIAL BOILERS | 107.4 | 100.4 | 145.5 | 193.4 | 182.4 | 65.6 | 81.1 | 83.1 |
| COMMERCIAL-RESIDENTIAL | 52.5 | 33.1 | 93.8 | 69.0 | 47.2 | 10.7 | 1.9 | 1.4 |
| ANTHRACITE COAL | | | | | | | | |
| ALL USES | 11.9 | 4.6 | 1.0 | .3 | .2 | .1 | .0 | .0 |
| RESIDUAL OIL | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .1 | .1 | .2 | 5.4 | 3.0 | .4 | .1 |
| INDUSTRIAL | 4.2 | 4.0 | 10.1 | 7.1 | 4.6 | 2.8 | 4.7 | 6.8 |
| COMMERCIAL | .1 | .3 | 9.7 | 7.0 | 5.7 | 4.8 | 5.1 | .2 |
| DISTILLATE OIL | | | | | | | | |
| ELECTRIC UTILITIES | .3 | .1 | .0 | .0 | .1 | .4 | 1.5 | .4 |
| INDUSTRIAL | .6 | .7 | .0 | .5 | .6 | .4 | .5 | .8 |
| COMMERCIAL-RESIDENTIAL | 1.9 | 2.6 | 18.6 | 20.9 | 19.1 | 13.8 | 15.0 | 7.9 |
| NATURAL GAS | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| PIPELINES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| COMMERCIAL-RESIDENTIAL | .0 | .0 | .0 | .0 | .0 | .1 | .1 | .2 |
| WOOD | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | .0 | .1 | .1 | .1 | .1 | .1 | .1 | .1 |
| COMMERCIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDENTIAL | .4 | .3 | .2 | .2 | .2 | .2 | .2 | .3 |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE | 2.0 | 2.5 | 2.6 | 3.0 | 3.9 | 4.5 | 5.4 | 5.0 |
| DIESEL | .2 | .2 | .3 | .9 | 2.6 | 3.3 | 5.0 | 5.2 |
| OTHER | | | | | | | | |
| RAILROADS-COAL | 66.9 | 21.7 | 3.1 | 1.5 | .8 | .0 | .0 | .0 |
| -OIL | .9 | 1.5 | 1.6 | 1.0 | 1.3 | 1.0 | 1.2 | 1.5 |
| COKE PLANTS | 1.5 | 1.6 | .8 | .9 | .7 | .5 | .3 | .4 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS-DISTILLATE | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -RESIDUAL | .0 | .2 | .3 | .4 | .0 | .4 | .6 | .2 |
| OFF HIGHWAY DIESEL | .1 | .2 | .3 | .6 | .7 | .5 | .5 | .4 |
| CEMENT PLANT | 2.4 | 3.1 | 3.7 | 3.8 | .8 | .7 | 2.5 | 1.9 |
| WILD FIRES | .0 | .0 | .1 | .0 | .0 | .0 | .0 | .0 |
| MISCELLANEOUS | 39.5 | 37.0 | 35.1 | 37.1 | 37.4 | 29.0 | 29.7 | 27.7 |

TABLE 3. SO2 EMISSIONS (1000 TONS) 1900-1945 WYOMING

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | | | |
| ELECTRIC UTILITIES | .7 | 1.2 | 1.7 | 2.3 | 2.4 | 2.0 | 1.6 | 1.1 | 1.8 | 2.5 |
| INDUSTRIAL BOILERS | 3.8 | 4.6 | 4.8 | 4.7 | 4.7 | 5.4 | 4.7 | 3.8 | 4.2 | 4.8 |
| COMMERCIAL-RESIDENTIAL | 3.2 | 4.0 | 4.4 | 4.8 | 4.6 | 5.3 | 5.3 | 3.9 | 3.5 | 4.2 |
| ANTHRACITE COAL | | | | | | | | | | |
| ALL USES | .0 | .0 | .0 | .0 | .0 | .0 | NA | NA | NA | NA |
| RESIDUAL OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | NA | NA | NA | NA | NA | 3.8 | 3.6 | 3.6 | 4.5 | 6.8 |
| COMMERCIAL | NA | NA | NA | NA | NA | .1 | .1 | .2 | .2 | 11.7 |
| DISTILLATE OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | NA | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .1 |
| COMMERCIAL-RESIDENTIAL | NA | NA | NA | NA | NA | .0 | .0 | .0 | .1 | 1.2 |
| NATURAL GAS | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| WOOD | | | | | | | | | | |
| ALL USES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE | .0 | .0 | .0 | .0 | .0 | .0 | .1 | .1 | .1 | .1 |
| DIESEL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL | 8.8 | 10.9 | 11.3 | 10.0 | 9.8 | 7.9 | 6.5 | 5.0 | 5.2 | 7.1 |
| -OIL | NA | NA | NA | NA | NA | 1.8 | 1.7 | 1.4 | 1.4 | 2.7 |
| COKE PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| SMELTERS-COPPER | 4.2 | .2 | .2 | .4 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS FUEL OIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CEMENT PLANTS | .0 | .0 | .0 | .0 | NA | NA | NA | NA | NA | NA |
| WILD FIRES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .1 | .0 |
| MISCELLANEOUS | 7.5 | 8.4 | 9.4 | 10.1 | 10.6 | 11.8 | 12.7 | 12.8 | 12.9 | 16.9 |

TABLE 4. SO2 EMISSIONS (1000 TONS) 1950-1980 WYOMING

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | |
| ELECTRIC UTILITIES | 3.2 | 5.3 | 19.1 | 45.4 | 38.5 | 76.3 | 113.5 | 167.6 |
| INDUSTRIAL BOILERS | 2.2 | 2.1 | 2.5 | 4.9 | 2.6 | 7.3 | 20.3 | 22.3 |
| COMMERCIAL-RESIDENTIAL | 1.5 | 1.0 | 1.2 | .9 | .3 | .4 | .7 | 1.3 |
| ANTHRACITE COAL | | | | | | | | |
| ALL USES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDUAL OIL | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | 9.8 | 7.6 | 3.0 | 3.7 | 4.6 | 6.3 | 8.5 | 11.0 |
| COMMERCIAL | .1 | .3 | 2.2 | 1.7 | 2.5 | 2.9 | 6.7 | .1 |
| DISTILLATE OIL | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .1 | .0 | .0 | .0 | .1 | .1 | .1 |
| INDUSTRIAL | .5 | .8 | .9 | .7 | .8 | 1.1 | 1.7 | 3.2 |
| COMMERCIAL-RESIDENTIAL | .4 | .7 | .3 | .5 | .8 | 1.3 | 1.4 | .4 |
| NATURAL GAS | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| PIPELINES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| COMMERCIAL-RESIDENTIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| WOOD | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| COMMERCIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDENTIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE | .3 | .4 | .4 | .4 | .5 | .6 | .8 | .8 |
| DIESEL | .1 | .1 | .2 | .4 | .7 | 1.1 | 1.6 | 1.6 |
| OTHER | | | | | | | | |
| RAILROADS-COAL | 3.9 | 1.3 | .4 | .2 | .1 | .0 | .0 | .0 |
| -OIL | 2.9 | 2.6 | 2.8 | 2.9 | 3.2 | 2.8 | 3.3 | 5.0 |
| COKE PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS-DISTILLATE | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -RESIDUAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| OFF HIGHWAY DIESEL | .1 | .1 | .4 | .4 | .3 | .6 | 1.0 | 1.3 |
| CEMENT PLANT | .6 | .9 | 1.0 | 1.3 | 1.2 | 1.4 | 1.5 | 1.4 |
| WILD FIRES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| MISCELLANEOUS | 20.9 | 22.4 | 24.0 | 26.4 | 28.6 | 26.7 | 28.0 | 26.5 |

TABLE 3. SO2 EMISSIONS (1000 TONS) 1900-1945 FOR THE U.S.

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | | | |
| ELECTRIC UTILITIES | 412.2 | 682.3 | 933.2 | 1245.4 | 1552.3 | 1942.6 | 1946.7 | 1405.8 | 2234.7 | 3262.0 |
| INDUSTRIAL BOILERS | 3213.9 | 4428.2 | 5530.6 | 6624.5 | 6893.0 | 7105.0 | 5943.3 | 4808.1 | 5355.9 | 6091.7 |
| COMMERCIAL-RESIDENTIAL | 1137.5 | 1615.8 | 2094.3 | 2739.5 | 2864.2 | 3266.9 | 3547.7 | 2903.0 | 3063.8 | 4327.2 |
| ANTHRACITE COAL | | | | | | | | | | |
| ALL USES | 783.2 | 1061.2 | 1144.6 | 1200.2 | 1210.8 | 904.1 | 472.1 | 357.2 | 593.9 | 603.3 |
| RESIDUAL OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | 167.9 | 133.2 | 118.1 | 145.9 | 177.0 |
| INDUSTRIAL | .0 | .0 | .0 | .0 | .0 | 589.4 | 563.1 | 558.0 | 591.8 | 743.8 |
| COMMERCIAL | .0 | .0 | .0 | .0 | .0 | 34.1 | 57.8 | 92.3 | 123.2 | 609.6 |
| DISTILLATE OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | 4.6 | 3.7 | 3.3 | 3.5 | 5.8 |
| INDUSTRIAL | .0 | .0 | .0 | .0 | .0 | 6.2 | 6.1 | 6.1 | 8.6 | 21.4 |
| COMMERCIAL-RESIDENTIAL | .0 | .0 | .0 | .0 | .0 | 14.1 | 24.8 | 39.8 | 54.2 | 97.0 |
| NATURAL GAS | | | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | .0 | .0 | .0 | .0 | .0 | .2 | .3 | .1 | .4 | .7 |
| PIPELINES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| COMMERCIAL-RESIDENTIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .1 |
| WOOD | | | | | | | | | | |
| ALL USES | 15.2 | 14.0 | 13.6 | 13.2 | 12.5 | 11.7 | 11.0 | 11.0 | 10.6 | 9.7 |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE | .0 | .0 | .1 | 2.3 | 9.4 | 21.2 | 35.3 | 39.5 | 52.9 | 46.0 |
| DIESEL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL | 2570.6 | 3697.8 | 4592.1 | 5079.8 | 5587.9 | 4626.0 | 3970.5 | 3102.8 | 3421.6 | 4978.0 |
| -OIL | .0 | .0 | .0 | .0 | .0 | 108.0 | 101.3 | 83.3 | 81.4 | 151.7 |
| COKE PLANTS | .6 | 1.1 | 1.3 | 1.5 | 1.9 | 1.8 | 2.0 | 1.3 | 2.1 | 2.4 |
| SMELTERS-COPPER | 599.0 | 921.7 | 1147.0 | 1343.9 | 1072.1 | 1557.3 | 1207.4 | 785.0 | 1978.3 | 1524.1 |
| -LEAD | 64.3 | 97.0 | 119.9 | 163.4 | 145.5 | 203.5 | 165.8 | 110.8 | 136.4 | 116.6 |
| -ZINC | 37.1 | 124.2 | 206.0 | 292.2 | 150.9 | 317.7 | 275.7 | 237.7 | 419.5 | 442.4 |
| VESSELS FUEL OIL | .0 | .0 | .0 | .0 | .0 | 482.8 | 573.2 | 454.0 | 399.8 | 611.7 |
| CEMENT PLANTS | 14.3 | 62.1 | 112.6 | 144.6 | 161.5 | 216.6 | 213.6 | 98.0 | 165.8 | 113.7 |
| WILD FIRES | 16.1 | 16.1 | 16.1 | 16.1 | 16.1 | 16.1 | 31.5 | 20.5 | 17.7 | 13.3 |
| MISCELLANEOUS | 1123.6 | 1237.1 | 1362.3 | 1422.6 | 1466.0 | 1663.2 | 1817.5 | 1742.3 | 1656.4 | 2058.4 |

TABLE 3. SO2 EMISSIONS (1000 TONS) 1950-1980 FOR THE U.S.

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | |
| ELECTRIC UTILITIES | 4062.7 | 6206.4 | 8882.3 | 12079.1 | 16042.8 | 17871.1 | 15441.5 | 16625.1 |
| INDUSTRIAL BOILERS | 3491.7 | 3400.4 | 3228.9 | 3731.6 | 3189.5 | 1810.0 | 2100.1 | 1997.1 |
| COMMERCIAL-RESIDENTIAL | 2539.7 | 1597.7 | 1026.9 | 633.2 | 438.1 | 138.1 | 59.2 | 178.4 |
| ANTHRACITE COAL | | | | | | | | |
| ALL USES | 572.7 | 359.9 | 246.7 | 178.6 | 129.0 | 80.2 | 85.4 | 61.3 |
| RESIDUAL OIL | | | | | | | | |
| ELECTRIC UTILITIES | 451.7 | 358.5 | 362.7 | 542.1 | 1626.2 | 1566.2 | 1757.3 | 1336.1 |
| INDUSTRIAL | 1012.8 | 1143.2 | 996.5 | 872.8 | 906.6 | 812.3 | 1043.1 | 1087.9 |
| COMMERCIAL | 193.8 | 215.5 | 602.5 | 762.1 | 1076.2 | 834.4 | 770.7 | 486.6 |
| DISTILLATE OIL | | | | | | | | |
| ELECTRIC UTILITIES | 11.8 | 5.3 | 4.1 | 3.1 | 21.7 | 50.7 | 60.3 | 23.3 |
| INDUSTRIAL | 46.8 | 55.0 | 41.4 | 39.5 | 36.9 | 53.2 | 77.9 | 69.2 |
| COMMERCIAL-RESIDENTIAL | 125.6 | 159.4 | 457.6 | 423.5 | 411.2 | 362.5 | 399.0 | 248.1 |
| NATURAL GAS | | | | | | | | |
| ELECTRIC UTILITIES | .2 | .3 | .6 | .7 | 1.1 | .9 | .9 | 1.1 |
| INDUSTRIAL | 1.3 | 1.8 | 1.8 | 2.2 | 2.4 | 2.1 | 2.0 | 2.1 |
| PIPELINES | .0 | .0 | .2 | .4 | .6 | .5 | .6 | .4 |
| COMMERCIAL-RESIDENTIAL | .7 | .7 | 1.2 | 1.6 | 2.2 | 2.2 | 2.3 | 2.5 |
| WOOD | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | 1.7 | 2.0 | 2.2 | 2.7 | 3.2 | 3.4 | 4.5 | 4.4 |
| COMMERCIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDENTIAL | 13.0 | 9.9 | 8.0 | 5.9 | 5.1 | 5.4 | 7.9 | 10.4 |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE | 85.9 | 111.0 | 117.8 | 145.1 | 178.9 | 208.9 | 245.0 | 246.1 |
| DIESEL | 15.2 | 17.1 | 26.4 | 53.5 | 118.7 | 157.1 | 210.6 | 233.9 |
| MISCELLANEOUS | | | | | | | | |
| RAILROADS-COAL | 2421.0 | 641.7 | 106.4 | 21.9 | 11.1 | .0 | .0 | .0 |
| -OIL | 131.2 | 119.3 | 110.2 | 108.2 | 108.4 | 112.0 | 119.5 | 127.4 |
| COKE PLANTS | 378.8 | 432.4 | 208.2 | 248.0 | 228.5 | 204.8 | 157.9 | 158.1 |
| SMELTERS-COPPER | 2021.0 | 2187.2 | 2308.3 | 2892.1 | 3491.4 | 2160.9 | 1330.4 | 1120.3 |
| -ZINC | 128.1 | 100.6 | 73.5 | 472.2 | 313.0 | 83.8 | 76.7 | 49.9 |
| -LEAD | 494.5 | 662.9 | 381.0 | 193.2 | 126.3 | 33.7 | 30.9 | 17.8 |
| VESSELS-DISTILLATE | 2.0 | 2.6 | 2.9 | 2.3 | 2.9 | 4.0 | 5.6 | 4.2 |
| -RESIDUAL | 124.1 | 153.8 | 124.4 | 96.7 | 117.5 | 127.1 | 206.0 | 282.8 |
| OFF HIGHWAY DIESEL | 9.2 | 13.6 | 24.5 | 32.3 | 31.9 | 31.3 | 44.4 | 29.1 |
| CEMENT PLANTS | 364.5 | 475.9 | 493.7 | 563.4 | 562.2 | 481.9 | 605.0 | 541.5 |
| WILD FIRES | 11.2 | 5.7 | 3.6 | 2.2 | 1.9 | 1.0 | 2.8 | 3.0 |
| MISCELLANEOUS | 2490.3 | 2443.2 | 2424.9 | 2639.9 | 2760.3 | 2320.1 | 2399.7 | 2248.3 |

# SECTION 3.0

# STATE $NO_x$ EMISSIONS

TABLE 5. NOX EMISSIONS (1000 TONS) 1900-1945 ALABAMA

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | | | |
| ELECTRIC UTILITIES | 1.0 | 1.6 | 2.2 | 2.9 | 3.5 | 4.1 | 4.9 | 4.6 | 9.0 | 15.5 |
| INDUSTRIAL BOILERS | 9.3 | 13.3 | 17.3 | 21.5 | 22.7 | 23.5 | 18.7 | 13.7 | 13.8 | 13.9 |
| COMMERCIAL-RESIDENTIAL | .7 | 1.0 | 1.4 | 1.9 | 2.1 | 2.3 | 2.4 | 1.9 | 1.8 | 2.4 |
| ANTHRACITE COAL | | | | | | | | | | |
| ALL USES | .0 | .1 | .1 | .1 | .1 | .1 | NA | NA | NA | NA |
| RESIDUAL OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | NA | NA | NA | NA | NA | .1 | .1 | .1 | .2 | .8 |
| COMMERCIAL | NA | NA | NA | NA | NA | .0 | .0 | .0 | .1 | .1 |
| DISTILLATE OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .1 |
| INDUSTRIAL | NA | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .1 |
| COMMERCIAL-RESIDENTIAL | NA | NA | NA | NA | NA | .0 | .0 | .0 | .1 | .2 |
| NATURAL GAS | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | NA | NA | .2 | .2 | 1.6 |
| INDUSTRIAL | NA | NA | NA | .1 | .0 | .0 | .4 | 6.8 | 9.5 | 15.8 |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | NA | .0 | .0 | .0 | .0 | .1 | .1 | .2 |
| WOOD | | | | | | | | | | |
| ALL USES | 3.9 | 3.7 | 3.6 | 3.4 | 3.3 | 3.1 | 2.9 | 2.8 | 2.7 | 2.5 |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE | .0 | .0 | .2 | .8 | 2.9 | 6.3 | 10.1 | 10.2 | 15.4 | 16.9 |
| DIESEL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL | 4.4 | 6.6 | 8.5 | 9.7 | 11.2 | 9.9 | 8.9 | 7.4 | 8.5 | 12.8 |
| -OIL | NA | NA | NA | NA | NA | 1.0 | 1.0 | .8 | .9 | 3.0 |
| COKE PLANTS | .5 | .6 | .8 | .8 | 1.0 | .9 | .8 | .6 | .8 | .9 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS FUEL OIL | NA | NA | NA | NA | NA | 11.8 | 14.0 | 11.1 | 9.3 | 16.8 |
| CEMENT PLANTS | .0 | NA | NA | NA | NA | 1.5 | 1.2 | .6 | 1.3 | 1.4 |
| WILD FIRES | 61.2 | 61.2 | 61.2 | 61.2 | 61.2 | 61.2 | 29.1 | 38.3 | 16.1 | 12.8 |
| MISCELLANEOUS | 11.2 | 12.2 | 13.2 | 13.4 | 13.6 | 15.2 | 16.6 | 15.5 | 14.2 | 20.5 |

TABLE 6. NOX EMISSIONS (1000 TONS) 1950-1980 ALABAMA

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | |
| ELECTRIC UTILITIES | 11.6 | 56.5 | 83.5 | 144.6 | 181.2 | 221.3 | 158.5 | 211.4 |
| INDUSTRIAL BOILERS | 8.8 | 8.2 | 2.7 | 21.8 | 21.5 | 20.5 | 29.7 | 22.6 |
| COMMERCIAL-RESIDENTIAL | 1.7 | 1.1 | 1.4 | .5 | .8 | .1 | .2 | 1.0 |
| ANTHRACITE COAL | | | | | | | | |
| ALL USES | .0 | .0 | .2 | .3 | .0 | .0 | .0 | .4 |
| RESIDUAL OIL | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | 1.2 | 1.5 | 2.0 | .8 | 1.7 | 3.1 | 6.7 | 4.4 |
| COMMERCIAL | .0 | .1 | .1 | .0 | .1 | 1.9 | 2.0 | .3 |
| DISTILLATE OIL | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .1 | .0 | .0 | .1 | 1.1 | 2.0 | .2 |
| INDUSTRIAL | .6 | .6 | .9 | .5 | .7 | .9 | 1.2 | 1.0 |
| COMMERCIAL-RESIDENTIAL | .4 | .7 | .4 | .4 | .7 | 1.5 | 1.9 | .5 |
| NATURAL GAS | | | | | | | | |
| ELECTRIC UTILITIES | 4.0 | 4.3 | 2.3 | 1.2 | 3.8 | 1.5 | 1.7 | .3 |
| INDUSTRIAL | 28.3 | 38.1 | 36.5 | 42.0 | 12.0 | 10.7 | 9.1 | 11.2 |
| PIPELINES | 3.0 | 7.9 | 9.5 | 15.0 | 25.1 | 23.5 | 17.8 | 33.1 |
| COMMERCIAL-RESIDENTIAL | .8 | 1.8 | 2.9 | 4.0 | 4.6 | 4.3 | 4.3 | 4.0 |
| WOOD | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | 1.3 | 1.5 | 1.7 | 2.3 | 3.0 | 3.3 | 3.9 | 3.9 |
| COMMERCIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDENTIAL | 2.8 | 2.2 | 1.8 | 1.2 | .8 | .9 | .9 | 1.0 |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE | 34.0 | 48.0 | 60.2 | 74.8 | 83.9 | 115.5 | 125.0 | 110.2 |
| DIESEL | 1.5 | 1.9 | 3.7 | 7.3 | 17.6 | 26.8 | 38.6 | 46.5 |
| OTHER | | | | | | | | |
| RAILROADS-COAL | 7.1 | 2.2 | .4 | .0 | .0 | .0 | .0 | .0 |
| -OIL | 5.0 | 9.0 | 11.3 | 12.4 | 15.6 | 21.2 | 22.1 | 23.0 |
| COKE PLANTS | .2 | .2 | .1 | .1 | .2 | .1 | .1 | .1 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS-DISTILLATE | .4 | .6 | .5 | .1 | .7 | 1.5 | 2.5 | .7 |
| -RESIDUAL | 1.3 | 3.0 | 2.6 | 1.4 | 1.9 | 8.3 | 8.5 | 3.7 |
| OFF HIGHWAY DIESEL | 2.3 | 2.3 | 8.0 | 4.9 | 10.9 | 9.9 | 22.4 | 5.4 |
| CEMENT PLANT | 2.5 | 3.0 | 2.9 | 3.4 | 3.1 | 2.6 | 3.8 | 3.3 |
| WILD FIRES | 7.6 | 3.8 | 2.1 | 1.6 | 2.5 | .8 | 6.2 | 2.2 |
| MISCELLANEOUS | 28.1 | 26.0 | 24.3 | 27.5 | 30.2 | 21.4 | 20.6 | 18.4 |

TABLE 5. NOX EMISSIONS (1000 TONS) 1900-1945 ARIZONA

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL BOILERS | .1 | .2 | .2 | .3 | .9 | 1.8 | 1.8 | 1.4 | 1.4 | 1.5 |
| COMMERCIAL-RESIDENTIAL | .0 | .1 | .1 | .2 | .2 | .2 | .2 | .2 | .2 | .2 |
| ANTHRACITE COAL | | | | | | | | | | |
| ALL USES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDUAL OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .6 | .5 | .5 | .6 | .2 |
| INDUSTRIAL | NA | NA | NA | NA | NA | 1.7 | 1.6 | 1.6 | .9 | 1.0 |
| COMMERCIAL | NA | NA | NA | NA | NA | .0 | .0 | .0 | .0 | NA |
| DISTILLATE OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .2 | .2 | .2 | .1 | .1 |
| INDUSTRIAL | NA | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .0 |
| COMMERCIAL-RESIDENTIAL | NA | NA | NA | NA | NA | .0 | .0 | .1 | .1 | .1 |
| NATURAL GAS | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | .0 | .0 | .0 | .5 | .7 | .5 |
| INDUSTRIAL | NA | NA | .0 | .0 | .0 | .0 | .0 | 4.5 | 6.3 | 7.1 |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | .0 | .0 | .0 | .0 | .0 | .1 | .1 | .3 |
| WOOD | | | | | | | | | | |
| ALL USES | .4 | .4 | .4 | .3 | .3 | .3 | .3 | .3 | .3 | .3 |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE | .0 | .0 | .0 | .2 | .8 | 1.7 | 4.1 | 4.1 | 6.0 | 6.5 |
| DIESEL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL | 1.1 | 1.9 | 2.8 | 3.7 | 4.2 | 3.4 | 2.8 | 2.1 | 2.2 | 3.1 |
| -OIL | NA | NA | NA | NA | NA | 18.4 | 17.3 | 14.2 | 15.4 | 13.6 |
| COKE PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS FUEL OIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CEMENT PLANTS | .0 | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| WILD FIRES | .1 | .1 | .1 | .1 | .1 | .1 | .0 | .8 | .6 | .1 |
| MISCELLANEOUS | 1.0 | 1.2 | 1.5 | 1.5 | 1.6 | 2.3 | 2.8 | 2.3 | 1.7 | 3.6 |

TABLE 6. NOX EMISSIONS (1000 TONS) 1950-1980 ARIZONA

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | 3.8 | 5.6 | 44.5 | 88.7 | 143.9 |
| INDUSTRIAL BOILERS | .8 | .8 | .7 | .7 | .4 | 1.1 | 4.1 | 6.2 |
| COMMERCIAL-RESIDENTIAL | .1 | .0 | .1 | .2 | .0 | .0 | .0 | .0 |
| ANTHRACITE COAL | | | | | | | | |
| ALL USES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDUAL OIL | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | 6.0 | 3.4 | 1.1 |
| INDUSTRIAL | .2 | .0 | .1 | .0 | .0 | .2 | .6 | .2 |
| COMMERCIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| DISTILLATE OIL | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | 5.4 | 1.7 | 1.7 |
| INDUSTRIAL | .1 | .1 | .4 | .5 | 1.0 | 1.9 | 2.4 | 1.1 |
| COMMERCIAL-RESIDENTIAL | .2 | .2 | .1 | .1 | .1 | .3 | .7 | .1 |
| NATURAL GAS | | | | | | | | |
| ELECTRIC UTILITIES | 3.4 | 5.8 | 13.0 | 9.1 | 14.4 | 4.3 | 13.3 | 12.2 |
| INDUSTRIAL | 14.7 | 17.8 | 4.8 | 17.5 | 4.0 | 3.6 | 3.2 | 2.6 |
| PIPELINES | 3.8 | 10.7 | 19.9 | 22.5 | 29.9 | 21.4 | 19.0 | 26.7 |
| COMMERCIAL-RESIDENTIAL | .6 | 1.0 | 2.6 | 2.2 | 2.6 | 3.5 | 3.0 | 2.9 |
| WOOD | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | .1 | .1 | .1 | .1 | .1 | .1 | .2 | .2 |
| COMMERCIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDENTIAL | .4 | .3 | .2 | .2 | .2 | .3 | .3 | .4 |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE | 13.6 | 20.6 | 29.9 | 38.2 | 56.5 | 72.9 | 78.8 | 70.5 |
| DIESEL | 2.0 | 1.3 | 2.7 | 3.5 | 16.4 | 20.2 | 28.4 | 31.6 |
| OTHER | | | | | | | | |
| RAILROADS-COAL | 1.7 | .5 | 1.1 | .1 | .0 | .0 | .0 | .0 |
| -OIL | 10.4 | .5 | 7.4 | 9.0 | 8.0 | 8.2 | 12.0 | 10.1 |
| COKE PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS-DISTILLATE | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -RESIDUAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| OFF HIGHWAY DIESEL | 1.4 | 2.4 | 5.1 | 6.8 | 2.8 | 2.8 | 9.5 | 5.9 |
| CEMENT PLANT | .5 | .7 | .9 | .9 | 1.2 | 1.6 | 1.9 | 1.7 |
| WILD FIRES | .3 | .6 | .7 | .4 | .8 | 1.0 | .6 | 4.4 |
| MISCELLANEOUS | 6.6 | 5.4 | 4.3 | 8.6 | 11.3 | 5.5 | 4.2 | 3.1 |

TABLE 5. NOX EMISSIONS (1000 TONS) 1900-1945 ARKANSAS

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | | | |
| ELECTRIC UTILITIES | .3 | .6 | .8 | 1.0 | 1.2 | 1.4 | 1.2 | .7 | .9 | .9 |
| INDUSTRIAL BOILERS | 1.6 | 2.3 | 3.0 | 3.7 | 3.4 | 2.6 | 1.8 | 1.2 | 1.0 | .9 |
| COMMERCIAL-RESIDENTIAL | .3 | .5 | .6 | .9 | .9 | 1.1 | 1.1 | .7 | .6 | .6 |
| ANTHRACITE COAL | | | | | | | | | | |
| ALL USES | .0 | .0 | .0 | .0 | .0 | .0 | NA | NA | NA | NA |
| RESIDUAL OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | NA | NA | NA | NA | .0 |
| INDUSTRIAL | NA | NA | NA | NA | NA | .3 | .3 | .3 | .4 | .2 |
| COMMERCIAL | NA | NA | NA | NA | NA | .1 | .1 | .2 | .2 | .0 |
| DISTILLATE OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .1 | .1 | .1 | .1 | .1 |
| INDUSTRIAL | NA | NA | NA | NA | NA | .1 | .1 | .1 | .0 | .1 |
| COMMERCIAL-RESIDENTIAL | NA | NA | NA | NA | NA | .0 | .1 | .1 | .2 | .4 |
| NATURAL GAS | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | .1 | .1 | .4 | .4 | .5 | 1.9 |
| INDUSTRIAL | NA | NA | NA | .1 | 8.4 | 26.9 | 16.8 | 9.4 | 13.1 | 31.4 |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | NA | .0 | .3 | .3 | .4 | .3 | .5 | .7 |
| WOOD | | | | | | | | | | |
| ALL USES | 3.3 | 3.1 | 3.0 | 2.9 | 2.7 | 2.6 | 2.5 | 2.4 | 2.3 | 2.2 |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE | .0 | .0 | .1 | .6 | 2.1 | 4.6 | 7.9 | 7.8 | 11.0 | 11.8 |
| DIESEL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL | 3.4 | 5.1 | 6.5 | 7.5 | 8.2 | 6.6 | 5.5 | 4.2 | 4.4 | 6.0 |
| -OIL | NA | NA | NA | NA | NA | 15.0 | 14.1 | 11.6 | 10.5 | 17.1 |
| COKE PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS FUEL OIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | .4 |
| CEMENT PLANTS | .0 | NA | .0 | .0 | .0 | .0 | NA | NA | NA | NA |
| WILD FIRES | 142.2 | 142.2 | 142.2 | 142.2 | 142.2 | 142.2 | 89.0 | 26.4 | 25.5 | 2.8 |
| MISCELLANEOUS | 6.8 | 7.4 | 8.1 | 8.2 | 8.2 | 9.0 | 9.6 | 9.0 | 8.2 | 11.1 |

TABLE 6. NOX EMISSIONS (1000 TONS) 1950-1980 ARKANSAS

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | |
| ELECTRIC UTILITIES | .1 | .0 | .0 | .0 | .0 | .0 | 20.5 | 39.0 |
| INDUSTRIAL BOILERS | .0 | .5 | .3 | .3 | .0 | .3 | 2.8 | 3.4 |
| COMMERCIAL-RESIDENTIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| ANTHRACITE COAL | | | | | | | | |
| ALL USES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDUAL OIL | | | | | | | | |
| ELECTRIC UTILITIES | .1 | .1 | .1 | .0 | 1.6 | 5.0 | 15.2 | 3.3 |
| INDUSTRIAL | .2 | .1 | .5 | .4 | .2 | 3.7 | 4.1 | 1.7 |
| COMMERCIAL | .0 | .0 | .0 | .0 | .0 | .8 | .3 | .2 |
| DISTILLATE OIL | | | | | | | | |
| ELECTRIC UTILITIES | .1 | .1 | .1 | .0 | .0 | .2 | 2.2 | .6 |
| INDUSTRIAL | .2 | .1 | .1 | .1 | .2 | .5 | .8 | .3 |
| COMMERCIAL-RESIDENTIAL | .7 | .5 | .1 | .2 | .5 | 1.3 | .9 | .2 |
| NATURAL GAS | | | | | | | | |
| ELECTRIC UTILITIES | 4.8 | 11.3 | 11.5 | 16.1 | 26.4 | 7.8 | 1.7 | 14.4 |
| INDUSTRIAL | 40.8 | 54.5 | 38.6 | 47.5 | 10.7 | 9.0 | 8.1 | 8.7 |
| PIPELINES | 7.1 | 11.6 | 17.2 | 21.4 | 28.3 | 15.3 | 20.5 | 16.8 |
| COMMERCIAL-RESIDENTIAL | 1.2 | 1.6 | 2.5 | 3.2 | 4.9 | 4.1 | 4.1 | 3.9 |
| WOOD | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | 1.0 | 1.2 | 1.2 | 1.5 | 1.8 | 1.9 | 3.0 | 2.5 |
| COMMERCIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDENTIAL | 2.5 | 2.0 | 1.6 | 1.1 | .7 | .7 | .8 | .8 |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE | 24.0 | 31.2 | 38.1 | 49.6 | 54.3 | 65.6 | 69.5 | 62.2 |
| DIESEL | 1.2 | 1.3 | 1.7 | 3.4 | 14.5 | 20.3 | 30.7 | 30.4 |
| OTHER | | | | | | | | |
| RAILROADS-COAL | 3.3 | 1.1 | .2 | .1 | .0 | .0 | .0 | .0 |
| -OIL | 20.1 | 7.4 | 4.9 | 8.2 | 9.3 | 18.6 | 11.9 | 12.7 |
| COKE PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS-DISTILLATE | .2 | .4 | .0 | .2 | .1 | .6 | .5 | .1 |
| -RESIDUAL | .1 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| OFF HIGHWAY DIESEL | 2.4 | 2.7 | 5.7 | 5.4 | 7.3 | 7.5 | 14.7 | 11.3 |
| CEMENT PLANT | .5 | .7 | .8 | .8 | 1.1 | 1.2 | 1.5 | 1.4 |
| WILD FIRES | 3.0 | 2.1 | 5.4 | 1.4 | 2.3 | .8 | 1.2 | 2.9 |
| MISCELLANEOUS | 14.2 | 12.5 | 11.1 | 10.5 | 10.2 | 6.1 | 5.4 | 4.9 |

TABLE 5. NOX EMISSIONS (1000 TONS) 1900-1945 CALIFORNIA

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL BOILERS | 2.6 | 3.3 | 3.8 | 4.2 | 3.1 | 1.3 | .5 | .5 | .7 | 1.0 |
| COMMERCIAL-RESIDENTIAL | .6 | .7 | .9 | 1.1 | 1.1 | 1.3 | 1.3 | .8 | .7 | .7 |
| ANTHRACITE COAL | | | | | | | | | | |
| ALL USES | .0 | .0 | .0 | .0 | .0 | .0 | NA | NA | NA | NA |
| RESIDUAL OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | 1.5 | 1.2 | 1.1 | .7 | 3.5 |
| INDUSTRIAL | NA | NA | NA | NA | NA | 11.5 | 11.0 | 10.9 | 15.5 | 19.2 |
| COMMERCIAL | NA | NA | NA | NA | NA | 1.7 | 2.8 | 4.6 | 5.7 | 27.2 |
| DISTILLATE OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .2 | .2 | .1 | .0 | .2 |
| INDUSTRIAL | NA | NA | NA | NA | NA | .2 | .1 | .1 | .3 | .4 |
| COMMERCIAL-RESIDENTIAL | NA | NA | NA | NA | NA | .7 | 1.1 | 1.8 | 1.1 | 2.7 |
| NATURAL GAS | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | 1.2 | 2.5 | 6.4 | 2.3 | 3.4 | 8.6 |
| INDUSTRIAL | NA | NA | 15.1 | 10.6 | 32.4 | 100.2 | 154.6 | 84.5 | 117.9 | 134.8 |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | .0 | .2 | .6 | .9 | 2.4 | 2.5 | 4.6 | 8.6 |
| WOOD | | | | | | | | | | |
| ALL USES | 6.2 | 5.9 | 5.6 | 5.4 | 5.2 | 4.9 | 4.7 | 4.5 | 4.3 | 4.0 |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE | .0 | .2 | 1.2 | 6.1 | 21.5 | 46.2 | 71.9 | 82.8 | 108.9 | 111.4 |
| DIESEL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL | 12.3 | 16.5 | 18.8 | 19.0 | 19.8 | 15.9 | 13.3 | 10.0 | 10.5 | 14.4 |
| -OIL | NA | NA | NA | NA | NA | 167.4 | 157.4 | 129.0 | 127.9 | 235.6 |
| COKE PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .1 | .1 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS FUEL OIL | NA | NA | NA | NA | NA | 217.3 | 258.0 | 204.4 | 177.7 | 222.8 |
| CEMENT PLANTS | .0 | .3 | NA | 1.1 | 1.7 | 3.2 | 1.4 | 1.9 | 3.5 | 3.9 |
| WILD FIRES | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 | 8.0 | 6.4 | 7.4 | 22.2 |
| MISCELLANEOUS | 20.7 | 24.2 | 28.1 | 29.5 | 30.5 | 41.5 | 50.2 | 43.1 | 35.0 | 67.7 |

TABLE 6. NOX EMISSIONS (1000 TONS) 1950-1980 CALIFORNIA

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL BOILERS | 9.9 | 9.2 | .1 | 3.7 | .1 | 2.6 | 10.7 | 13.2 |
| COMMERCIAL-RESIDENTIAL | .0 | .0 | .0 | .1 | .6 | .0 | .0 | .0 |
| ANTHRACITE COAL | | | | | | | | |
| ALL USES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDUAL OIL | | | | | | | | |
| ELECTRIC UTILITIES | 13.2 | 23.4 | 28.0 | 19.7 | 20.2 | 96.1 | 92.8 | 91.1 |
| INDUSTRIAL | 17.7 | 18.9 | 14.4 | 17.8 | 20.3 | 11.6 | 11.3 | 14.5 |
| COMMERCIAL | 9.2 | 7.8 | 2.4 | 1.0 | 4.9 | 2.0 | 1.7 | 4.1 |
| DISTILLATE OIL | | | | | | | | |
| ELECTRIC UTILITIES | .2 | .1 | .4 | .2 | .2 | 3.4 | 4.8 | 1.5 |
| INDUSTRIAL | .9 | 1.6 | 2.5 | 3.2 | 4.0 | 3.5 | 5.5 | 2.7 |
| COMMERCIAL-RESIDENTIAL | 3.2 | 4.0 | 1.4 | .7 | 2.1 | 2.9 | 4.0 | 3.4 |
| NATURAL GAS | | | | | | | | |
| ELECTRIC UTILITIES | 19.2 | 45.0 | 79.1 | 132.4 | 155.9 | 67.2 | 74.0 | 127.1 |
| INDUSTRIAL | 162.6 | 223.2 | 163.4 | 174.9 | 43.3 | 40.7 | 29.2 | 29.6 |
| PIPELINES | 6.5 | 11.2 | 13.2 | 19.6 | 136.3 | 131.4 | 105.4 | 97.6 |
| COMMERCIAL-RESIDENTIAL | 12.6 | .2 | 23.7 | 32.6 | 38.1 | 43.6 | 37.9 | 39.4 |
| WOOD | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | 3.1 | 3.7 | 4.0 | 5.3 | 6.5 | 7.0 | 8.7 | 8.6 |
| COMMERCIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDENTIAL | 3.3 | 2.5 | 2.1 | 1.8 | 2.0 | 2.2 | 2.9 | 3.7 |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE | 180.5 | 213.9 | 297.6 | 367.9 | 506.6 | 549.1 | 594.3 | 515.3 |
| DIESEL | 26.7 | 24.0 | 32.7 | 52.5 | 104.6 | 109.8 | 157.2 | 166.5 |
| OTHER | | | | | | | | |
| RAILROADS-COAL | 7.8 | 2.5 | .5 | .3 | .1 | .0 | .0 | .0 |
| -OIL | 121.6 | 85.8 | 46.3 | 65.2 | 78.6 | 51.0 | 46.3 | 56.6 |
| COKE PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS-DISTILLATE | 3.3 | 3.1 | 4.8 | 4.8 | 4.5 | 3.0 | 8.9 | 4.4 |
| -RESIDUAL | 24.1 | 29.6 | 33.6 | 22.9 | 27.0 | 24.8 | 62.7 | 82.9 |
| OFF HIGHWAY DIESEL | 18.3 | 26.4 | 33.8 | 61.3 | 22.5 | 29.0 | 33.5 | 21.6 |
| CEMENT PLANT | 6.4 | 8.7 | 9.7 | 11.0 | 12.2 | 9.4 | 12.1 | 11.5 |
| WILD FIRES | 17.6 | 12.9 | 11.2 | 4.2 | 15.7 | 7.7 | 6.6 | 13.7 |
| MISCELLANEOUS | 117.5 | 105.7 | 96.3 | 151.0 | 189.1 | 122.6 | 112.3 | 94.8 |

TABLE 5. NOX EMISSIONS (1000 TONS) 1900-1945 COLORADO

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | | | |
| ELECTRIC UTILITIES | 1.6 | 2.7 | 3.7 | 5.0 | 5.5 | 5.5 | 4.6 | 3.0 | 4.3 | 5.5 |
| INDUSTRIAL BOILERS | 14.6 | 19.7 | 23.9 | 27.9 | 26.5 | 23.4 | 17.7 | 13.4 | 14.0 | 14.9 |
| COMMERCIAL-RESIDENTIAL | 1.9 | 2.6 | 3.4 | 4.4 | 4.6 | 5.2 | 5.3 | 3.8 | 3.5 | 4.2 |
| ANTHRACITE COAL | | | | | | | | | | |
| ALL USES | .0 | .0 | .0 | .0 | .0 | .0 | NA | NA | NA | NA |
| RESIDUAL OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .0 | .0 | .0 | .1 | .1 |
| INDUSTRIAL | NA | NA | NA | NA | NA | .2 | .2 | .2 | .2 | .6 |
| COMMERCIAL | NA | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .0 |
| DISTILLATE OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .0 | .0 | .0 | .1 | .1 |
| INDUSTRIAL | NA | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .0 |
| COMMERCIAL-RESIDENTIAL | NA | NA | NA | NA | NA | .0 | .0 | .0 | .1 | .1 |
| NATURAL GAS | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | NA | NA | .1 | .2 | 1.3 |
| INDUSTRIAL | NA | NA | NA | NA | .0 | .3 | 6.8 | 4.6 | 6.4 | 0.2 |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | NA | .0 | .0 | .0 | .3 | .2 | .4 | .6 |
| WOOD | | | | | | | | | | |
| ALL USES | .6 | .6 | .6 | .5 | .5 | .5 | .5 | .5 | .4 | .4 |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE | .0 | .0 | .1 | .5 | 1.9 | 4.1 | 6.4 | 6.5 | 8.8 | 8.2 |
| DIESEL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL | 4.4 | 6.1 | 7.4 | 7.9 | 8.5 | 6.8 | 5.7 | 4.3 | 4.5 | 6.1 |
| -OIL | NA | NA | NA | NA | NA | 1.5 | 1.4 | 1.2 | 2.7 | 8.0 |
| COKE PLANTS | .1 | .2 | .2 | .2 | .2 | .2 | .2 | .1 | .2 | .2 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS FUEL OIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CEMENT PLANTS | .0 | .2 | NA | NA | NA | NA | NA | NA | NA | NA |
| WILD FIRES | .1 | .1 | .1 | .1 | .1 | .1 | .0 | .0 | .1 | 1.0 |
| MISCELLANEOUS | 2.8 | 3.4 | 4.1 | 4.1 | 4.1 | 4.8 | 5.3 | 4.8 | 4.1 | 6.5 |

TABLE 6. NOX EMISSIONS (1000 TONS) 1950-1980 COLORADO

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | |
| ELECTRIC UTILITIES | 3.5 | 5.3 | 14.0 | 25.1 | 37.5 | 74.0 | 104.8 | 133.2 |
| INDUSTRIAL BOILERS | 4.9 | 4.6 | 5.3 | 4.3 | 5.5 | 6.5 | 5.4 | 8.1 |
| COMMERCIAL-RESIDENTIAL | 2.1 | 1.3 | 1.3 | 1.6 | 1.4 | .1 | .3 | .5 |
| ANTHRACITE COAL | | | | | | | | |
| ALL USES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDUAL OIL | | | | | | | | |
| ELECTRIC UTILITIES | .2 | .1 | .1 | .0 | .3 | 1.2 | .4 | .2 |
| INDUSTRIAL | .7 | .8 | 1.4 | .8 | .8 | 1.3 | 1.5 | 1.9 |
| COMMERCIAL | .0 | .0 | .2 | .3 | .2 | .7 | 1.1 | .0 |
| DISTILLATE OIL | | | | | | | | |
| ELECTRIC UTILITIES | .2 | .1 | .1 | .0 | .0 | .7 | .6 | .3 |
| INDUSTRIAL | .1 | .1 | .2 | .1 | .2 | .5 | .6 | .8 |
| COMMERCIAL-RESIDENTIAL | .1 | .3 | .5 | .6 | .7 | 1.0 | .9 | .2 |
| NATURAL GAS | | | | | | | | |
| ELECTRIC UTILITIES | 4.9 | 8.7 | 9.1 | 6.5 | 12.6 | 13.0 | 7.2 | 7.8 |
| INDUSTRIAL | 20.7 | 32.3 | 29.0 | 31.9 | 5.9 | 4.6 | 4.2 | 3.7 |
| PIPELINES | 1.4 | 1.5 | 1.5 | 2.4 | 5.7 | 16.3 | 19.3 | 18.2 |
| COMMERCIAL-RESIDENTIAL | 1.7 | 2.5 | 4.0 | 5.2 | 7.1 | 8.8 | 8.2 | 7.8 |
| WOOD | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | .1 | .1 | .2 | .2 | .3 | .3 | .6 | .5 |
| COMMERCIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDENTIAL | .6 | .4 | .3 | .3 | .3 | .4 | .6 | .8 |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE | 15.5 | 21.3 | 26.9 | 33.8 | 46.5 | 60.0 | 65.2 | 67.6 |
| DIESEL | 1.5 | 2.2 | 4.4 | 5.3 | 11.2 | 14.7 | 19.5 | 20.6 |
| OTHER | | | | | | | | |
| RAILROADS-COAL | 3.3 | 1.1 | .2 | .1 | .0 | .0 | .0 | .0 |
| -OIL | 6.7 | 11.1 | 11.5 | 12.0 | 8.0 | 11.6 | 15.7 | 23.7 |
| COKE PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS-DISTILLATE | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -RESIDUAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| OFF HIGHWAY DIESEL | 1.6 | 2.0 | 5.4 | 10.2 | 8.4 | 7.6 | 7.7 | 7.7 |
| CEMENT PLANT | .6 | .8 | 1.0 | 1.0 | 1.2 | 1.6 | 1.9 | 1.7 |
| WILD FIRES | 1.8 | .4 | .9 | .1 | .6 | .8 | 1.3 | 2.0 |
| MISCELLANEOUS | 9.7 | 7.8 | 6.1 | 9.2 | 11.1 | 4.9 | 3.3 | 2.4 |

TABLE 5. NOX EMISSIONS (1000 TONS) 1900-1945 CONNECTICUT

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | | | |
| ELECTRIC UTILITIES | 1.7 | 2.9 | 3.9 | 5.2 | 6.1 | 6.7 | 6.5 | 4.9 | 8.1 | 12.2 |
| INDUSTRIAL BOILERS | 10.2 | 13.5 | 16.2 | 18.7 | 18.9 | 19.2 | 15.4 | 11.8 | 12.4 | 13.2 |
| COMMERCIAL-RESIDENTIAL | .4 | .6 | .7 | .9 | 1.0 | 1.1 | 1.2 | .9 | .9 | 1.2 |
| ANTHRACITE COAL | | | | | | | | | | |
| ALL USES | 10.6 | 14.4 | 15.5 | 16.2 | 16.4 | 12.2 | 4.3 | 3.2 | 5.3 | 5.7 |
| RESIDUAL OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | 1.4 | 1.1 | 1.0 | 2.0 | 1.6 |
| INDUSTRIAL | NA | NA | NA | NA | NA | 1.9 | 1.8 | 1.8 | 1.7 | 1.9 |
| COMMERCIAL | NA | NA | NA | NA | NA | .0 | .0 | .0 | .1 | .2 |
| DISTILLATE OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .4 | .3 | .3 | .2 | .5 |
| INDUSTRIAL | NA | NA | NA | NA | NA | .2 | .2 | .2 | .2 | .3 |
| COMMERCIAL-RESIDENTIAL | NA | NA | NA | NA | NA | .4 | .7 | 1.2 | 1.5 | 1.5 |
| NATURAL GAS | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| WOOD | | | | | | | | | | |
| ALL USES | 1.0 | 1.0 | .9 | .9 | .9 | .8 | .8 | .8 | .7 | .7 |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE | .0 | .0 | .2 | 1.0 | 3.5 | 7.5 | 13.8 | 16.5 | 22.5 | 16.7 |
| DIESEL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL | 3.7 | 5.1 | 6.0 | 6.4 | 6.9 | 5.7 | 4.9 | 3.8 | 4.3 | 6.4 |
| -OIL | NA | NA | NA | NA | NA | 1.0 | .9 | .8 | .9 | 3.2 |
| COKE PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .1 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS FUEL OIL | NA | NA | NA | NA | NA | .3 | .3 | .2 | 1.3 | .5 |
| CEMENT PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| WILD FIRES | .5 | .5 | .5 | .5 | .5 | .5 | 1.2 | .2 | .1 | .1 |
| MISCELLANEOUS | 4.6 | 5.1 | 5.7 | 5.7 | 5.7 | 7.1 | 8.2 | 7.0 | 5.7 | 9.3 |

TABLE 6. NOX EMISSIONS (1000 TONS) 1950-1980 CONNECTICUT

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | |
| ELECTRIC UTILITIES | 11.8 | 25.9 | 31.9 | 47.1 | 19.5 | .0 | .2 | .0 |
| INDUSTRIAL BOILERS | 3.7 | 3.5 | 3.5 | 3.5 | 1.3 | .2 | .0 | .0 |
| COMMERCIAL-RESIDENTIAL | .4 | .2 | .4 | .1 | .0 | .0 | .0 | .1 |
| ANTHRACITE COAL | | | | | | | | |
| ALL USES | 6.6 | 2.7 | .9 | .4 | .1 | .1 | .0 | .1 |
| RESIDUAL OIL | | | | | | | | |
| ELECTRIC UTILITIES | 6.0 | 2.4 | 2.0 | 3.2 | 25.2 | 26.1 | 24.2 | 24.4 |
| INDUSTRIAL | 7.3 | 7.4 | 9.9 | 11.0 | 11.4 | 6.1 | 11.7 | 7.7 |
| COMMERCIAL | .1 | .1 | 2.2 | 2.3 | 2.8 | 2.4 | 3.1 | .7 |
| DISTILLATE OIL | | | | | | | | |
| ELECTRIC UTILITIES | .8 | .1 | .1 | .0 | 1.8 | 2.2 | .1 | .2 |
| INDUSTRIAL | .4 | .6 | .6 | .6 | .5 | .5 | .7 | 1.8 |
| COMMERCIAL-RESIDENTIAL | 2.1 | 2.0 | 11.1 | 8.1 | 8.1 | 6.9 | 7.6 | 6.6 |
| NATURAL GAS | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .2 | .4 | .1 | .0 | .1 | .0 | .0 |
| INDUSTRIAL | .0 | 1.4 | 2.8 | 4.2 | 1.0 | 1.1 | 1.1 | 1.4 |
| PIPELINES | .0 | .1 | .3 | .1 | .1 | .1 | .0 | .1 |
| COMMERCIAL-RESIDENTIAL | .0 | .5 | 1.0 | 1.4 | 2.3 | 2.4 | 2.4 | 2.6 |
| WOOD | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | .4 | .5 | .5 | .6 | .7 | .7 | .9 | .9 |
| COMMERCIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDENTIAL | .7 | .5 | .4 | .4 | .5 | .5 | .8 | 1.1 |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE | 25.2 | 33.0 | 38.0 | 48.0 | 76.2 | 82.8 | 76.9 | 72.2 |
| DIESEL | .4 | .4 | 1.5 | 5.2 | 11.0 | 11.5 | 14.0 | 15.0 |
| OTHER | | | | | | | | |
| RAILROADS-COAL | 2.8 | .6 | .1 | .0 | .0 | .0 | .0 | .0 |
| -OIL | 6.1 | 8.7 | 5.4 | 3.7 | 3.8 | 2.6 | 2.0 | .7 |
| COKE PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS-DISTILLATE | .0 | .0 | .1 | .1 | .1 | .1 | .1 | .1 |
| -RESIDUAL | .0 | .1 | .0 | .1 | .1 | .7 | .5 | .1 |
| OFF HIGHWAY DIESEL | .5 | .7 | .6 | 1.5 | 3.5 | 4.9 | 4.2 | 3.4 |
| CEMENT PLANT | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| WILD FIRES | .0 | .0 | .0 | .0 | .0 | .1 | .1 | .0 |
| MISCELLANEOUS | 14.5 | 11.6 | 9.1 | 12.7 | 14.8 | 6.3 | 4.1 | 2.9 |

TABLE 5. NOX EMISSIONS (1000 TONS) 1900-1945 DELAWARE

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDUSTRIAL BOILERS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACITE COAL | | | | | | | | | | |
| ALL USES | 1.1 | 1.5 | 1.7 | 1.7 | 1.7 | 1.3 | 1.3 | 1.0 | 1.6 | 2.5 |
| RESIDUAL OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .0 | .0 | .0 | NA | .0 |
| INDUSTRIAL | NA | NA | NA | NA | NA | 1.5 | 1.5 | 1.4 | 1.4 | 1.2 |
| COMMERCIAL | NA | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .0 |
| DISTILLATE OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .0 | .0 | .0 | .1 | .0 |
| INDUSTRIAL | NA | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .0 |
| COMMERCIAL-RESIDENTIAL | NA | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .1 |
| NATURAL GAS | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| WOOD | | | | | | | | | | |
| ALL USES | .4 | .4 | .3 | .3 | .3 | .3 | .3 | .3 | .3 | .2 |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE | .0 | .0 | .0 | .1 | .5 | 1.1 | 2.1 | 2.7 | 3.7 | 3.0 |
| DIESEL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| -OIL | NA | NA | NA | NA | NA | .1 | .0 | .0 | .1 | .0 |
| COKE PLANTS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS FUEL OIL | NA | NA | NA | NA | NA | .1 | .2 | .1 | .2 | .1 |
| CEMENT PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| WILD FIRES | .1 | .1 | .1 | .1 | .1 | .1 | .5 | .0 | .0 | .0 |
| MISCELLANEOUS | 1.1 | 1.2 | 1.2 | 1.2 | 1.3 | 1.4 | 1.5 | 1.4 | 1.3 | 2.0 |

TABLE 6. NOX EMISSIONS (1000 TONS) 1950-1980 DELAWARE

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | |
| ELECTRIC UTILITIES | .1 | 5.2 | 8.5 | 12.1 | 18.0 | 11.2 | 9.0 | 13.0 |
| INDUSTRIAL BOILERS | 1.7 | 1.6 | 9.3 | 10.4 | 1.5 | .2 | 1.0 | 1.9 |
| COMMERCIAL-RESIDENTIAL | .2 | .1 | .2 | .1 | .0 | .0 | .0 | .0 |
| ANTHRACITE COAL | | | | | | | | |
| ALL USES | 2.2 | 1.2 | .8 | .3 | .2 | .1 | .1 | .0 |
| RESIDUAL OIL | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .1 | 1.8 | 7.3 | 9.1 | 7.2 |
| INDUSTRIAL | 2.0 | 2.8 | 3.9 | 4.6 | 4.0 | 2.0 | 2.3 | 2.0 |
| COMMERCIAL | .0 | .0 | .4 | .3 | .4 | .5 | .5 | 2.4 |
| DISTILLATE OIL | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .1 | .1 | .1 | .5 | .7 | 1.5 | .3 |
| INDUSTRIAL | .1 | .1 | .1 | .1 | .1 | .5 | .4 | .2 |
| COMMERCIAL-RESIDENTIAL | .3 | .3 | 1.3 | 1.4 | 1.5 | 1.3 | 1.1 | .9 |
| NATURAL GAS | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .4 | .8 | 1.2 | .9 | .4 | .4 | 1.7 |
| INDUSTRIAL | .0 | .3 | .5 | 2.1 | .8 | .5 | .6 | .9 |
| PIPELINES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| COMMERCIAL-RESIDENTIAL | 1.9 | .1 | .2 | .3 | .5 | .5 | .5 | .5 |
| WOOD | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | .2 | .2 | .2 | .3 | .4 | .5 | .6 | .5 |
| COMMERCIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDENTIAL | .2 | .2 | .1 | .1 | .1 | .1 | .2 | .2 |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE | 5.7 | 7.9 | 9.9 | 12.3 | 14.0 | 16.9 | 17.6 | 16.2 |
| DIESEL | .2 | .2 | .4 | 1.2 | 2.0 | 1.9 | 3.2 | 5.1 |
| OTHER | | | | | | | | |
| RAILROADS-COAL | .5 | .2 | .0 | .0 | .0 | .0 | .0 | .0 |
| -OIL | .5 | .5 | .6 | .3 | .6 | .4 | .2 | 3.6 |
| COKE PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS-DISTILLATE | .0 | .1 | .0 | .1 | .0 | .1 | .2 | .1 |
| -RESIDUAL | .5 | .1 | 1.1 | .6 | .7 | 1.1 | .9 | .5 |
| OFF HIGHWAY DIESEL | .1 | .3 | .1 | .6 | 1.4 | .7 | .7 | 1.3 |
| CEMENT PLANT | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| WILD FIRES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| MISCELLANEOUS | 2.8 | 2.4 | 2.1 | 3.1 | 3.8 | 2.2 | 1.9 | 1.6 |

TABLE 5. NOX EMISSIONS (1000 TONS) 1900-1945 DISTRICT OF COLUMBIA

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | | | |
| ELECTRIC UTILITIES | .5 | .8 | 1.0 | 1.4 | 1.5 | 1.5 | 1.3 | .9 | 1.5 | 2.1 |
| INDUSTRIAL BOILERS | 3.5 | 4.1 | 4.2 | 3.9 | 3.8 | 4.3 | 3.6 | 2.7 | 2.9 | 3.1 |
| COMMERCIAL-RESIDENTIAL | .0 | .1 | .1 | .1 | .1 | .1 | .1 | .1 | .2 | .3 |
| ANTHRACITE COAL | | | | | | | | | | |
| ALL USES | 1.1 | 1.5 | 1.6 | 1.6 | 1.7 | 1.2 | 1.8 | 1.4 | 2.3 | 2.2 |
| RESIDUAL OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .5 | .4 | .4 | .4 | .1 |
| INDUSTRIAL | NA | NA | NA | NA | NA | .1 | .1 | .1 | .1 | .1 |
| COMMERCIAL | NA | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .0 |
| DISTILLATE OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .1 | .0 | .0 | .1 | .1 |
| INDUSTRIAL | NA | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .0 |
| COMMERCIAL-RESIDENTIAL | NA | NA | NA | NA | NA | .0 | .0 | .0 | .1 | .1 |
| NATURAL GAS | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | .0 | .0 | .0 | NA | NA | NA |
| INDUSTRIAL | NA | NA | .0 | .0 | .0 | .0 | .0 | NA | NA | NA |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | .0 | .0 | .0 | .0 | .0 | NA | NA | NA |
| WOOD | | | | | | | | | | |
| ALL USES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE | .0 | .0 | .1 | .4 | 1.3 | 2.9 | 5.2 | 7.2 | 10.2 | 6.7 |
| DIESEL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL | .8 | .9 | 1.0 | .8 | .8 | .7 | .6 | .5 | .6 | .9 |
| -OIL | NA | NA | NA | NA | NA | .2 | .2 | .2 | .8 | 1.3 |
| COKE PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .1 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS FUEL OIL | NA | NA | NA | NA | NA | .0 | .0 | .0 | .1 | .1 |
| CEMENT PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| WILD FIRES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| MISCELLANEOUS | 1.4 | 1.5 | 1.7 | 1.7 | 1.7 | 2.1 | 2.5 | 2.1 | 1.7 | 3.3 |

TABLE 6. NOX EMISSIONS (1000 TONS) 1950-1980 DISTRICT OF COLUMBIA

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | |
| ELECTRIC UTILITIES | 9.1 | 8.3 | 5.1 | 3.4 | 7.8 | 1.3 | .0 | .0 |
| INDUSTRIAL BOILERS | .9 | .9 | 4.0 | 1.4 | 3.7 | 2.3 | .8 | .2 |
| COMMERCIAL-RESIDENTIAL | 1.0 | .7 | .7 | .5 | .2 | .0 | .0 | .5 |
| ANTHRACITE COAL | | | | | | | | |
| ALL USES | 1.5 | .7 | .2 | .2 | .1 | .0 | .0 | .0 |
| RESIDUAL OIL | | | | | | | | |
| ELECTRIC UTILITIES | .1 | .0 | .0 | .0 | 3.3 | 2.5 | .8 | .3 |
| INDUSTRIAL | .2 | .4 | .1 | .2 | .1 | .1 | .0 | .0 |
| COMMERCIAL | .0 | .0 | 1.2 | 3.5 | 4.6 | 1.2 | .9 | .1 |
| DISTILLATE OIL | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .1 | .1 | .1 | 2.0 | .2 | 5.5 | 2.2 |
| INDUSTRIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| COMMERCIAL-RESIDENTIAL | .1 | .1 | 1.0 | 1.0 | 1.2 | 1.0 | .9 | .6 |
| NATURAL GAS | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | .0 | .2 | .4 | .2 | .3 | .3 | .2 | .0 |
| PIPELINES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| COMMERCIAL-RESIDENTIAL | .2 | .6 | .9 | 1.1 | 1.6 | 1.6 | 1.6 | 1.4 |
| WOOD | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| COMMERCIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDENTIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE | 8.6 | 8.7 | 8.4 | 9.8 | 12.8 | 13.8 | 14.1 | 12.0 |
| DIESEL | .6 | .6 | 1.1 | 2.4 | 2.9 | 2.3 | 2.6 | 2.5 |
| OTHER | | | | | | | | |
| RAILROADS-COAL | NA | NA | NA | NA | NA | .0 | .0 | .0 |
| -OIL | 2.5 | 3.2 | .5 | .1 | 1.1 | 1.2 | 1.1 | .7 |
| COKE PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS-DISTILLATE | .0 | .0 | .1 | .0 | .0 | .0 | .0 | .0 |
| -RESIDUAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| OFF HIGHWAY DIESEL | .1 | .2 | .2 | .5 | .4 | .2 | .2 | .1 |
| CEMENT PLANT | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| WILD FIRES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| MISCELLANEOUS | 5.8 | 4.2 | 2.7 | 3.3 | 3.7 | 1.6 | 1.1 | .8 |

TABLE 5. NOX EMISSIONS (1000 TONS) 1900-1945 FLORIDA

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | | | |
| ELECTRIC UTILITIES | .1 | .2 | .2 | .3 | .3 | .3 | .6 | .8 | 2.0 | 3.8 |
| INDUSTRIAL BOILERS | .3 | .5 | .9 | 1.3 | 1.4 | 1.5 | 1.4 | 1.4 | 1.8 | 2.3 |
| COMMERCIAL-RESIDENTIAL | .0 | .1 | .2 | .3 | .3 | .3 | .5 | .6 | .8 | 1.4 |
| ANTHRACITE COAL | | | | | | | | | | |
| ALL USES | .1 | .2 | .2 | .2 | .2 | .2 | NA | NA | NA | NA |
| RESIDUAL OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | 4.7 | 3.7 | 3.3 | 4.7 | 8.0 |
| INDUSTRIAL | NA | NA | NA | NA | NA | 1.6 | 1.5 | 1.5 | 2.1 | 4.6 |
| COMMERCIAL | NA | NA | NA | NA | NA | .1 | .1 | .2 | .1 | 1.2 |
| DISTILLATE OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .2 | .2 | .1 | .2 | .4 |
| INDUSTRIAL | NA | NA | NA | NA | NA | .1 | .1 | .1 | .1 | .3 |
| COMMERCIAL-RESIDENTIAL | NA | NA | NA | NA | NA | .1 | .1 | .1 | .3 | .5 |
| NATURAL GAS | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | .0 | .0 | .0 | NA | NA | .6 |
| INDUSTRIAL | NA | NA | .0 | .0 | .0 | .0 | .0 | .4 | .6 | 2.8 |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| WOOD | | | | | | | | | | |
| ALL USES | 2.4 | 2.3 | 2.2 | 2.1 | 2.0 | 1.9 | 1.8 | 1.7 | 1.7 | 1.6 |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE | .0 | .0 | .3 | 1.7 | 5.8 | 12.5 | 13.5 | 15.5 | 23.3 | 21.5 |
| DIESEL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL | 1.6 | 3.3 | 5.3 | 7.2 | 8.8 | 7.7 | 7.0 | 5.8 | 6.7 | 10.1 |
| -OIL | NA | NA | NA | NA | NA | 9.0 | 8.4 | 6.9 | 7.8 | 11.9 |
| COKE PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS FUEL OIL | NA | NA | NA | NA | NA | 18.0 | 21.3 | 16.9 | 14.4 | 9.1 |
| CEMENT PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | NA | NA | NA | NA |
| WILD FIRES | 43.0 | 43.0 | 43.0 | 43.0 | 43.0 | 43.0 | 287.2 | 272.8 | 106.9 | 124.3 |
| MISCELLANEOUS | 5.1 | 5.8 | 6.7 | 7.0 | 7.1 | 9.5 | 11.3 | 9.7 | 7.9 | 15.6 |

TABLE 6. NOX EMISSIONS (1000 TONS) 1950-1980 FLORIDA

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | |
| ELECTRIC UTILITIES | .0 | 2.0 | 12.7 | 26.7 | 59.0 | 62.7 | 57.5 | 80.3 |
| INDUSTRIAL BOILERS | .0 | 1.8 | 2.2 | 1.3 | 1.2 | .2 | 2.4 | 7.5 |
| COMMERCIAL-RESIDENTIAL | .6 | .4 | .6 | .3 | .1 | .0 | .0 | .0 |
| ANTHRACITE COAL | | | | | | | | |
| ALL USES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDUAL OIL | | | | | | | | |
| ELECTRIC UTILITIES | 11.9 | 20.1 | 15.1 | 33.2 | 52.0 | 80.9 | 87.4 | 84.2 |
| INDUSTRIAL | 5.3 | 11.8 | 12.5 | 9.8 | 8.0 | 7.7 | 13.5 | 15.6 |
| COMMERCIAL | .3 | 1.3 | .5 | .2 | 1.0 | .6 | 1.4 | .9 |
| DISTILLATE OIL | | | | | | | | |
| ELECTRIC UTILITIES | .9 | 1.6 | 1.0 | .6 | 1.1 | 9.2 | 7.1 | 4.4 |
| INDUSTRIAL | .4 | .5 | .4 | 1.1 | .9 | .9 | 2.1 | 1.7 |
| COMMERCIAL-RESIDENTIAL | 1.0 | 1.9 | 2.3 | 2.8 | 2.8 | 2.3 | 2.5 | 1.6 |
| NATURAL GAS | | | | | | | | |
| ELECTRIC UTILITIES | 1.3 | 1.9 | 21.7 | 19.4 | 48.6 | 34.6 | 38.7 | 40.7 |
| INDUSTRIAL | 4.3 | 8.5 | 12.1 | 27.4 | 6.5 | 5.8 | 6.8 | 6.5 |
| PIPELINES | .0 | .0 | 1.3 | 3.2 | 5.7 | 10.8 | 8.1 | 14.9 |
| COMMERCIAL-RESIDENTIAL | .1 | .1 | .7 | 1.0 | 2.1 | 2.3 | 2.9 | 2.3 |
| WOOD | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | 1.3 | 1.6 | 1.7 | 2.2 | 2.8 | 2.7 | 3.6 | 3.7 |
| COMMERCIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDENTIAL | 1.1 | .9 | .7 | .5 | .6 | .8 | 1.0 | 1.1 |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE | 42.8 | 68.3 | 97.8 | 125.2 | 197.1 | 285.3 | 293.4 | 297.4 |
| DIESEL | 4.1 | 4.6 | 3.7 | 8.9 | 25.7 | 44.3 | 54.6 | 71.9 |
| OTHER | | | | | | | | |
| RAILROADS-COAL | 5.5 | 1.7 | .3 | .0 | .0 | .0 | .0 | .0 |
| -OIL | 13.4 | 19.5 | 16.2 | 19.1 | 23.0 | 12.0 | 15.0 | 15.1 |
| COKE PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS-DISTILLATE | .5 | 1.0 | 1.0 | .8 | .7 | 1.4 | 6.5 | 4.4 |
| -RESIDUAL | 1.1 | 2.1 | 2.7 | 2.2 | 2.6 | 2.7 | 4.9 | 14.3 |
| OFF HIGHWAY DIESEL | 4.9 | 7.3 | 11.2 | 9.5 | 12.7 | 13.6 | 18.3 | 8.6 |
| CEMENT PLANT | .9 | 1.8 | 2.1 | 2.1 | 1.5 | 2.2 | 3.9 | 4.3 |
| WILD FIRES | 86.7 | 67.0 | 22.7 | 5.9 | 1.5 | 5.3 | 1.6 | 2.9 |
| MISCELLANEOUS | 27.4 | 23.3 | 19.9 | 37.9 | 49.6 | 27.4 | 22.7 | 17.9 |

TABLE 5. NOX EMISSIONS (1000 TONS) 1900-1945 GEORGIA

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | | | |
| ELECTRIC UTILITIES | .6 | 1.0 | 1.4 | 1.9 | 1.9 | 1.4 | 1.1 | 1.1 | 2.0 | 3.5 |
| INDUSTRIAL BOILERS | 5.4 | 7.5 | 9.4 | 11.2 | 12.8 | 15.1 | 12.2 | 8.4 | 7.7 | 6.8 |
| COMMERCIAL-RESIDENTIAL | 1.0 | 1.5 | 2.0 | 2.6 | 2.7 | 3.1 | 3.2 | 2.3 | 2.2 | 2.6 |
| ANTHRACITE COAL | | | | | | | | | | |
| ALL USES | .3 | .4 | .4 | .4 | .4 | .3 | NA | NA | NA | NA |
| RESIDUAL OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .6 | .5 | .4 | .5 | .5 |
| INDUSTRIAL | NA | NA | NA | NA | NA | .8 | .7 | .7 | 1.1 | 1.6 |
| COMMERCIAL | NA | NA | NA | NA | NA | .0 | .1 | .1 | .1 | .2 |
| DISTILLATE OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .1 |
| INDUSTRIAL | NA | NA | NA | NA | NA | .0 | .0 | .0 | .1 | .1 |
| COMMERCIAL-RESIDENTIAL | NA | NA | NA | NA | NA | .0 | .1 | .1 | .2 | .3 |
| NATURAL GAS | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | NA | NA | .8 | 1.2 | 3.4 |
| INDUSTRIAL | NA | NA | .0 | .0 | .0 | .0 | .2 | 2.5 | 3.5 | 9.9 |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | .0 | .0 | .0 | .0 | .1 | .2 | .4 | .6 |
| WOOD | | | | | | | | | | |
| ALL USES | 6.1 | 5.8 | 5.6 | 5.3 | 5.1 | 4.9 | 4.6 | 4.4 | 4.3 | 4.0 |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE | .0 | .0 | .2 | 1.1 | 3.8 | 8.2 | 13.1 | 15.7 | 23.1 | 22.7 |
| DIESEL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL | 5.1 | 7.3 | 9.0 | 10.0 | 11.4 | 10.0 | 9.0 | 7.4 | 8.6 | 13.0 |
| -OIL | NA | NA | NA | NA | NA | .4 | .4 | .3 | .5 | 1.5 |
| COKE PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS FUEL OIL | NA | NA | NA | NA | NA | 1.9 | 2.3 | 1.8 | 1.9 | 5.7 |
| CEMENT PLANTS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| WILD FIRES | 40.5 | 40.5 | 40.5 | 40.5 | 40.5 | 40.5 | 82.9 | 48.8 | 58.1 | 11.0 |
| MISCELLANEOUS | 12.9 | 14.0 | 15.2 | 15.4 | 15.5 | 16.6 | 17.4 | 16.8 | 16.0 | 22.5 |

TABLE 6. NOX EMISSIONS (1000 TONS) 1950-1980 GEORGIA

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | |
| ELECTRIC UTILITIES | 9.8 | 18.3 | 30.0 | 60.8 | 85.9 | 168.1 | 190.4 | 224.6 |
| INDUSTRIAL BOILERS | .0 | 4.0 | 4.8 | 4.2 | 3.4 | 3.5 | 5.9 | 7.2 |
| COMMERCIAL-RESIDENTIAL | 1.5 | .9 | 1.3 | .7 | .5 | .2 | .0 | .1 |
| ANTHRACITE COAL | | | | | | | | |
| ALL USES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDUAL OIL | | | | | | | | |
| ELECTRIC UTILITIES | 1.0 | .5 | .0 | .1 | 1.8 | 2.7 | 5.2 | .2 |
| INDUSTRIAL | 2.9 | 3.7 | 5.3 | 6.7 | 7.6 | 5.0 | 5.9 | 6.2 |
| COMMERCIAL | .2 | .5 | .0 | .3 | 1.1 | 1.2 | 1.1 | .0 |
| DISTILLATE OIL | | | | | | | | |
| ELECTRIC UTILITIES | .4 | .0 | .0 | .0 | .1 | 3.9 | 3.9 | 1.3 |
| INDUSTRIAL | .2 | .2 | .3 | .8 | .7 | 1.0 | 1.3 | 1.2 |
| COMMERCIAL-RESIDENTIAL | .9 | 1.2 | .9 | .9 | 1.0 | .8 | .9 | .5 |
| NATURAL GAS | | | | | | | | |
| ELECTRIC UTILITIES | 6.0 | 8.5 | 6.2 | .2 | 14.4 | 9.9 | 1.4 | .9 |
| INDUSTRIAL | 17.0 | 31.0 | 26.3 | 36.7 | 9.9 | 10.2 | 7.9 | 10.9 |
| PIPELINES | .2 | .0 | 4.4 | 6.0 | 8.6 | 5.2 | 4.3 | 9.2 |
| COMMERCIAL-RESIDENTIAL | 1.2 | 2.2 | 3.9 | 4.7 | 6.3 | 6.8 | 7.8 | 10.2 |
| WOOD | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | 2.0 | 2.4 | 2.5 | 3.5 | 4.0 | 4.4 | 5.8 | 6.0 |
| COMMERCIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDENTIAL | 4.5 | 3.5 | 2.8 | 1.9 | 1.2 | 1.2 | 1.3 | 1.4 |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE | 45.1 | 64.6 | 78.1 | 100.7 | 140.7 | 183.5 | 186.1 | 165.8 |
| DIESEL | .9 | 1.2 | 3.7 | 14.5 | 36.7 | 45.9 | 58.4 | 64.9 |
| OTHER | | | | | | | | |
| RAILROADS-COAL | 7.1 | 2.2 | .4 | .0 | .0 | .0 | .0 | .0 |
| -OIL | 9.5 | 15.0 | 13.8 | 13.6 | 17.2 | 17.5 | 17.6 | 22.3 |
| COKE PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS-DISTILLATE | .1 | .1 | .1 | .1 | .2 | .1 | .2 | .8 |
| -RESIDUAL | .5 | 1.3 | 1.6 | .8 | .2 | .5 | .6 | 3.7 |
| OFF HIGHWAY DIESEL | 3.2 | 3.4 | 6.2 | 9.3 | 10.9 | 5.8 | 8.5 | 3.1 |
| CEMENT PLANT | .3 | .6 | .7 | .7 | 2.4 | 1.1 | 1.9 | 1.6 |
| WILD FIRES | 53.0 | 14.4 | 2.9 | .7 | 1.1 | .5 | 1.3 | .9 |
| MISCELLANEOUS | 29.9 | 26.8 | 24.2 | 29.7 | 33.6 | 21.7 | 19.9 | 17.5 |

TABLE 5. NOX EMISSIONS (1000 TONS) 1900-1945 IDAHO

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL BOILERS | 1.0 | 1.5 | 1.9 | 2.4 | 2.2 | 1.8 | 1.5 | 1.3 | 1.6 | 1.9 |
| COMMERCIAL-RESIDENTIAL | .3 | .5 | .6 | .9 | .9 | 1.1 | 1.2 | 1.1 | 1.2 | 1.8 |
| ANTHRACITE COAL | | | | | | | | | | |
| ALL USES | .0 | .0 | .0 | .0 | .0 | .0 | NA | NA | NA | NA |
| RESIDUAL OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .0 | .0 | .0 | .0 | NA |
| INDUSTRIAL | NA | NA | NA | NA | NA | .1 | .1 | .1 | .1 | .2 |
| COMMERCIAL | NA | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .0 |
| DISTILLATE OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .0 | .0 | .0 | NA | .0 |
| INDUSTRIAL | NA | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .0 |
| COMMERCIAL-RESIDENTIAL | NA | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .1 |
| NATURAL GAS | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | NA | NA | .0 | .0 | .0 |
| INDUSTRIAL | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| WOOD | | | | | | | | | | |
| ALL USES | 1.0 | .9 | .9 | .9 | .8 | .8 | .7 | .7 | .7 | .6 |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE | .0 | .0 | .0 | .2 | .8 | 1.8 | 3.1 | 3.8 | 5.6 | 5.5 |
| DIESEL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL | 2.6 | 4.0 | 5.2 | 6.0 | 6.6 | 5.3 | 4.4 | 3.3 | 3.5 | 4.8 |
| -OIL | NA | NA | NA | NA | NA | 2.9 | 2.7 | 2.2 | 2.5 | 3.7 |
| COKE PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS FUEL OIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CEMENT PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | NA | NA | NA | NA |
| WILD FIRES | .9 | .9 | .9 | .9 | .9 | .9 | .4 | .8 | .8 | 2.2 |
| MISCELLANEOUS | .9 | 1.3 | 1.8 | 1.8 | 1.8 | 2.2 | 2.4 | 2.2 | 1.9 | 3.0 |

TABLE 6. NOX EMISSIONS (1000 TONS) 1950-1980 IDAHO

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL BOILERS | 2.8 | 2.6 | 2.3 | 4.5 | 1.6 | 3.7 | 3.5 | 3.9 |
| COMMERCIAL-RESIDENTIAL | 1.3 | .8 | 1.4 | 1.0 | 1.1 | .6 | .3 | .6 |
| ANTHRACITE COAL | | | | | | | | |
| ALL USES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDUAL OIL | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | .4 | .6 | .0 | .1 | .1 | .1 | .5 | .1 |
| COMMERCIAL | .0 | .3 | .1 | .1 | .1 | .3 | .3 | .3 |
| DISTILLATE OIL | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | 1.1 | .2 | .2 | .3 | .4 | .6 | .5 | .4 |
| COMMERCIAL-RESIDENTIAL | .1 | .3 | 1.0 | 1.2 | 1.2 | 1.4 | 1.5 | .4 |
| NATURAL GAS | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | 44.7 |
| INDUSTRIAL | .0 | .0 | 5.3 | 6.4 | 2.0 | 2.1 | 1.9 | 2.2 |
| PIPELINES | .0 | .0 | .6 | 1.3 | 5.3 | 5.3 | 5.5 | 5.3 |
| COMMERCIAL-RESIDENTIAL | .0 | .0 | .2 | .5 | .7 | 1.3 | .7 | .7 |
| WOOD | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | .3 | .4 | .4 | .4 | .6 | .6 | .9 | .8 |
| COMMERCIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDENTIAL | .7 | .6 | .5 | .3 | .2 | .3 | .4 | .5 |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE | 11.6 | 14.2 | 15.9 | 18.8 | 21.8 | 26.6 | 31.1 | 25.7 |
| DIESEL | 2.4 | 2.4 | 2.0 | 4.3 | 4.3 | 6.8 | 10.1 | 7.9 |
| OTHER | | | | | | | | |
| RAILROADS-COAL | 2.6 | .8 | .2 | .1 | .0 | .0 | .0 | .0 |
| -OIL | 2.4 | 4.6 | 2.0 | 2.6 | 5.4 | 7.8 | 8.5 | 9.7 |
| COKE PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS-DISTILLATE | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -RESIDUAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| OFF HIGHWAY DIESEL | .6 | 2.2 | 4.8 | 5.8 | 5.5 | 6.6 | 7.9 | 3.8 |
| CEMENT PLANT | .1 | .1 | .1 | .2 | .2 | .2 | .3 | .2 |
| WILD FIRES | .4 | .2 | 2.4 | .4 | .9 | 1.1 | .4 | 1.9 |
| MISCELLANEOUS | 4.6 | 3.8 | 3.1 | 3.8 | 4.3 | 2.3 | 1.9 | 1.6 |

TABLE 5. NOX EMISSIONS (1000 TONS) 1900-1945 ILLINOIS

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | | | |
| ELECTRIC UTILITIES | 13.6 | 22.4 | 30.7 | 40.9 | 52.2 | 67.9 | 67.8 | 47.5 | 73.2 | 103.5 |
| INDUSTRIAL BOILERS | 105.5 | 141.2 | 171.0 | 198.4 | 188.9 | 168.7 | 134.7 | 112.3 | 123.7 | 150.5 |
| COMMERCIAL-RESIDENTIAL | 12.9 | 18.0 | 22.9 | 29.5 | 30.7 | 35.0 | 39.1 | 33.5 | 37.0 | 54.6 |
| ANTHRACITE COAL | | | | | | | | | | |
| ALL USES | 17.7 | 24.0 | 25.9 | 27.2 | 27.4 | 20.5 | 1.7 | 1.3 | 2.2 | 4.4 |
| RESIDUAL OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .1 | .1 | .1 | .1 | .1 |
| INDUSTRIAL | NA | NA | NA | NA | NA | 6.4 | 6.1 | 6.0 | 5.8 | 10.7 |
| COMMERCIAL | NA | NA | NA | NA | NA | .0 | .1 | .1 | .1 | .1 |
| DISTILLATE OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .3 | .2 | .2 | .2 | .3 |
| INDUSTRIAL | NA | NA | NA | NA | NA | .4 | .4 | .4 | .5 | .9 |
| COMMERCIAL-RESIDENTIAL | NA | NA | NA | NA | NA | .1 | .2 | .3 | .6 | 1.0 |
| NATURAL GAS | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | .0 | .0 | .0 | .6 | .8 | .4 |
| INDUSTRIAL | NA | NA | 3.3 | 1.2 | 1.6 | 2.3 | 5.6 | 20.7 | 28.9 | 36.5 |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | .1 | .0 | .0 | .0 | .0 | .7 | 1.2 | 1.6 |
| WOOD | | | | | | | | | | |
| ALL USES | 2.7 | 2.5 | 2.4 | 2.3 | 2.2 | 2.1 | 2.0 | 1.9 | 1.9 | 1.7 |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE | .0 | .1 | .9 | 4.6 | 16.1 | 34.5 | 57.8 | 63.0 | 87.5 | 68.1 |
| DIESEL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL | 24.1 | 33.6 | 40.3 | 43.0 | 46.6 | 38.6 | 33.2 | 26.0 | 29.1 | 43.3 |
| -OIL | NA | NA | NA | NA | NA | 6.4 | 6.0 | 4.9 | 5.0 | 10.3 |
| COKE PLANTS | .3 | .3 | .4 | .4 | .5 | .6 | .6 | .4 | .6 | .6 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS FUEL OIL | NA | NA | NA | NA | NA | 2.5 | 3.0 | 2.3 | 1.4 | 1.9 |
| CEMENT PLANTS | .1 | .4 | 1.1 | 1.3 | 1.4 | 1.7 | 1.9 | .8 | 1.2 | 1.1 |
| WILD FIRES | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | .8 | .0 | .9 | .2 |
| MISCELLANEOUS | 28.0 | 30.3 | 32.9 | 33.2 | 33.5 | 39.6 | 44.4 | 39.9 | 34.7 | 51.7 |

TABLE 6. NOX EMISSIONS (1000 TONS) 1950-1980 ILLINOIS

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | |
| ELECTRIC UTILITIES | 134.4 | 198.8 | 221.0 | 288.0 | 338.7 | 400.8 | 381.7 | 419.8 |
| INDUSTRIAL BOILERS | 102.9 | 96.2 | 122.1 | 134.6 | 62.5 | 33.2 | 30.1 | 32.2 |
| COMMERCIAL-RESIDENTIAL | 32.5 | 20.4 | 31.8 | 19.7 | 12.9 | 2.5 | 1.0 | .8 |
| ANTHRACITE COAL | | | | | | | | |
| ALL USES | 1.6 | .9 | .8 | 1.0 | .9 | .3 | .6 | .5 |
| RESIDUAL OIL | | | | | | | | |
| ELECTRIC UTILITIES | 1.0 | .1 | .1 | .1 | 4.7 | 6.5 | 14.1 | 15.4 |
| INDUSTRIAL | 13.5 | 15.3 | 13.9 | 9.3 | 10.7 | 12.5 | 13.3 | 14.4 |
| COMMERCIAL | .1 | .6 | 7.0 | 7.5 | 8.1 | 6.4 | 3.7 | 1.6 |
| DISTILLATE OIL | | | | | | | | |
| ELECTRIC UTILITIES | .8 | .4 | .4 | .3 | 4.7 | 9.2 | 12.6 | 1.7 |
| INDUSTRIAL | 2.1 | 2.3 | 1.2 | 2.1 | 1.9 | 1.9 | 2.7 | 1.8 |
| COMMERCIAL-RESIDENTIAL | 2.1 | 2.4 | 13.4 | 11.7 | 10.0 | 9.7 | 11.4 | 2.6 |
| NATURAL GAS | | | | | | | | |
| ELECTRIC UTILITIES | 8.3 | 13.6 | 10.4 | 8.1 | 32.4 | 8.4 | 5.5 | 4.7 |
| INDUSTRIAL | 56.9 | 82.3 | 65.3 | 77.4 | 26.6 | 24.7 | 25.7 | 24.4 |
| PIPELINES | 9.5 | 11.3 | 12.6 | 16.7 | 35.0 | 17.8 | 16.6 | 18.2 |
| COMMERCIAL-RESIDENTIAL | 3.9 | 7.7 | 14.0 | 23.5 | 32.2 | 34.7 | 38.6 | 35.3 |
| WOOD | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | .9 | 1.0 | 1.1 | 1.5 | 1.9 | 2.0 | 2.8 | 2.6 |
| COMMERCIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDENTIAL | 1.9 | 1.5 | 1.2 | .9 | 1.0 | 1.1 | 1.8 | 2.4 |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE | 115.2 | 138.2 | 158.2 | 191.1 | 259.0 | 279.9 | 270.1 | 243.5 |
| DIESEL | 4.3 | 7.8 | 7.3 | 24.5 | 57.4 | 74.1 | 91.2 | 87.9 |
| OTHER | | | | | | | | |
| RAILROADS-COAL | 18.7 | 3.8 | .5 | .0 | .0 | .0 | .0 | .0 |
| -OIL | 34.6 | 36.8 | 62.3 | 54.2 | 58.2 | 62.7 | 50.1 | 56.6 |
| COKE PLANTS | .1 | .1 | .1 | .1 | .1 | .1 | .0 | .0 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS-DISTILLATE | .6 | .8 | .6 | 1.1 | 1.1 | 1.6 | 1.0 | .5 |
| -RESIDUAL | .3 | .2 | .1 | .0 | .1 | .0 | .0 | .0 |
| OFF HIGHWAY DIESEL | 1.3 | 4.0 | 10.6 | 13.4 | 9.7 | 8.7 | 7.4 | 10.2 |
| CEMENT PLANT | 1.9 | 2.2 | 2.3 | 2.3 | 1.8 | 1.9 | 2.8 | 2.3 |
| WILD FIRES | .2 | .3 | .1 | .3 | .2 | .0 | .0 | .1 |
| MISCELLANEOUS | 73.6 | 66.3 | 60.0 | 70.7 | 78.4 | 48.6 | 43.6 | 37.8 |

TABLE 5. NOX EMISSIONS (1000 TONS) 1900-1945 INDIANA

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | | | |
| ELECTRIC UTILITIES | 6.7 | 11.1 | 15.1 | 20.2 | 23.8 | 26.7 | 26.9 | 21.1 | 36.2 | 56.8 |
| INDUSTRIAL BOILERS | 30.8 | 45.1 | 59.7 | 75.6 | 90.0 | 109.5 | 95.1 | 73.9 | 79.0 | 86.0 |
| COMMERCIAL-RESIDENTIAL | 3.5 | 5.3 | 7.4 | 10.3 | 11.0 | 12.6 | 13.9 | 11.7 | 12.7 | 18.3 |
| ANTHRACITE COAL | | | | | | | | | | |
| ALL USES | 3.2 | 4.4 | 4.7 | 4.9 | 5.0 | 3.7 | .5 | .4 | .7 | .7 |
| RESIDUAL OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .3 | .2 | .2 | .1 | .3 |
| INDUSTRIAL | NA | NA | NA | NA | NA | 6.6 | 6.3 | 6.2 | 7.7 | 12.3 |
| COMMERCIAL | NA | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .0 |
| DISTILLATE OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .2 | .2 | .1 | .1 | .3 |
| INDUSTRIAL | NA | NA | NA | NA | NA | .2 | .1 | .1 | .2 | .4 |
| COMMERCIAL-RESIDENTIAL | NA | NA | NA | NA | NA | .0 | .0 | .0 | .2 | .2 |
| NATURAL GAS | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | .0 | .0 | .0 | 1.4 | 2.1 | 1.0 |
| INDUSTRIAL | NA | NA | .9 | .6 | 1.0 | .6 | .9 | 5.7 | 7.9 | 12.9 |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | .2 | .2 | .1 | .0 | .0 | .1 | .2 | .4 |
| WOOD | | | | | | | | | | |
| ALL USES | 2.3 | 2.2 | 2.1 | 2.0 | 1.9 | 1.8 | 1.7 | 1.6 | 1.6 | 1.5 |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE | .0 | .1 | .4 | 2.3 | 7.9 | 17.1 | 26.5 | 29.2 | 39.6 | 36.2 |
| DIESEL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL | 11.9 | 18.2 | 23.8 | 27.8 | 31.3 | 25.9 | 22.3 | 17.4 | 19.5 | 29.0 |
| -OIL | NA | NA | NA | NA | NA | .5 | .5 | .4 | .5 | 2.4 |
| COKE PLANTS | .3 | .4 | .5 | .5 | .8 | 1.0 | 1.1 | .8 | 1.3 | 1.6 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS FUEL OIL | NA | NA | NA | NA | NA | 2.0 | 2.4 | 1.9 | 1.1 | 3.1 |
| CEMENT PLANTS | .0 | .8 | 1.8 | 2.0 | 2.6 | NA | NA | NA | NA | NA |
| WILD FIRES | .5 | .5 | .5 | .5 | .5 | .5 | 4.4 | .2 | 1.1 | .2 |
| MISCELLANEOUS | 14.3 | 14.9 | 15.6 | 15.7 | 15.8 | 17.6 | 18.9 | 17.7 | 16.4 | 23.8 |

TABLE 6. NOX EMISSIONS (1000 TONS) 1950-1980 INDIANA

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | |
| ELECTRIC UTILITIES | 72.3 | 112.9 | 155.1 | 208.3 | 262.0 | 330.2 | 319.5 | 391.3 |
| INDUSTRIAL BOILERS | 49.1 | 45.9 | 34.3 | 44.1 | 58.0 | 33.7 | 47.6 | 44.2 |
| COMMERCIAL-RESIDENTIAL | 11.8 | 7.4 | 10.6 | 5.4 | 4.1 | 3.0 | .2 | 1.1 |
| ANTHRACITE COAL | | | | | | | | |
| ALL USES | .0 | .0 | .4 | .7 | .6 | .2 | .1 | .0 |
| RESIDUAL OIL | | | | | | | | |
| ELECTRIC UTILITIES | .1 | .1 | .2 | .1 | .3 | .0 | .0 | .0 |
| INDUSTRIAL | 16.4 | 14.7 | 11.9 | 11.7 | 7.9 | 9.9 | 13.4 | 13.8 |
| COMMERCIAL | .1 | .0 | 1.1 | 1.0 | 1.3 | 3.3 | 4.0 | 1.4 |
| DISTILLATE OIL | | | | | | | | |
| ELECTRIC UTILITIES | .8 | .4 | .2 | .1 | .5 | 3.3 | 6.9 | 1.4 |
| INDUSTRIAL | 1.7 | 2.8 | 2.2 | 2.0 | 1.5 | 1.7 | 2.6 | 1.4 |
| COMMERCIAL-RESIDENTIAL | 1.4 | 1.7 | 8.5 | 8.0 | 7.5 | 7.1 | 7.9 | 3.2 |
| NATURAL GAS | | | | | | | | |
| ELECTRIC UTILITIES | .3 | 1.6 | 2.2 | 3.5 | 7.2 | 2.7 | .8 | .5 |
| INDUSTRIAL | 12.8 | 24.0 | 35.2 | 55.8 | 18.8 | 15.6 | 13.6 | 17.1 |
| PIPELINES | 4.2 | 5.0 | 6.3 | 10.0 | 13.9 | 12.0 | 6.1 | 11.1 |
| COMMERCIAL-RESIDENTIAL | 1.1 | 2.7 | 4.8 | 7.8 | 11.8 | 11.7 | 11.9 | 11.7 |
| WOOD | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | .4 | .5 | .5 | .7 | .8 | 1.1 | 1.6 | 1.6 |
| COMMERCIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDENTIAL | 2.0 | 1.5 | 1.3 | .9 | .9 | .9 | 1.6 | 2.2 |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE | 70.7 | 94.0 | 104.6 | 124.6 | 155.8 | 173.7 | 176.1 | 215.9 |
| DIESEL | 3.7 | 4.2 | 6.8 | 16.0 | 34.2 | 50.6 | 56.2 | 83.3 |
| OTHER | | | | | | | | |
| RAILROADS-COAL | 12.5 | 2.5 | .3 | .0 | .0 | .0 | .0 | .0 |
| -OIL | 6.3 | 20.0 | 22.3 | 19.2 | 21.0 | 19.6 | 21.8 | 30.4 |
| COKE PLANTS | .2 | .3 | .2 | .2 | .3 | .3 | .2 | .2 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS-DISTILLATE | .0 | .2 | .1 | .1 | .2 | .4 | .1 | .2 |
| -RESIDUAL | .4 | .1 | .2 | .3 | .2 | .4 | .2 | .2 |
| OFF HIGHWAY DIESEL | 1.6 | 3.7 | 5.3 | 7.1 | 14.4 | 7.0 | 5.5 | 4.9 |
| CEMENT PLANT | 2.4 | 3.2 | 3.6 | 3.7 | 3.7 | 3.6 | 3.3 | 2.6 |
| WILD FIRES | .1 | .1 | .2 | .1 | .1 | .0 | .0 | .0 |
| MISCELLANEOUS | 33.1 | 29.1 | 25.7 | 31.7 | 35.9 | 22.1 | 19.8 | 17.1 |

TABLE 5. NOX EMISSIONS (1000 TONS) 1900-1945 IOWA

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | | | |
| ELECTRIC UTILITIES | 3.3 | 5.4 | 7.4 | 9.9 | 11.2 | 11.5 | 10.0 | 6.6 | 9.6 | 12.7 |
| INDUSTRIAL BOILERS | 26.8 | 34.3 | 39.7 | 43.6 | 38.0 | 29.3 | 21.5 | 17.8 | 20.2 | 23.5 |
| COMMERCIAL-RESIDENTIAL | 4.5 | 6.1 | 7.4 | 9.0 | 9.2 | 10.5 | 10.9 | 8.4 | 8.2 | 10.8 |
| ANTHRACITE COAL | | | | | | | | | | |
| ALL USES | 1.7 | 2.3 | 2.4 | 2.6 | 2.6 | 1.9 | NA | NA | NA | NA |
| RESIDUAL OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .3 | .2 | .2 | .2 | .3 |
| INDUSTRIAL | NA | NA | NA | NA | NA | .2 | .2 | .2 | .0 | .2 |
| COMMERCIAL | NA | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .0 |
| DISTILLATE OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .3 | .2 | .2 | .3 | .6 |
| INDUSTRIAL | NA | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .0 |
| COMMERCIAL-RESIDENTIAL | NA | NA | NA | NA | NA | .0 | .1 | .1 | .3 | .6 |
| NATURAL GAS | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | .0 | .0 | .0 | .9 | 1.3 | 1.5 |
| INDUSTRIAL | NA | NA | NA | NA | NA | .0 | .0 | 4.0 | 5.5 | 7.7 |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | .0 | .0 | .0 | NA | NA | .2 | .3 | .5 |
| WOOD | | | | | | | | | | |
| ALL USES | .5 | .5 | .5 | .5 | .5 | .4 | .4 | .4 | .4 | .4 |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE | .0 | .1 | .4 | 1.8 | 6.5 | 13.9 | 22.1 | 23.9 | 30.2 | 26.5 |
| DIESEL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL | 8.9 | 11.9 | 13.6 | 13.7 | 14.3 | 11.5 | 9.6 | 7.2 | 7.6 | 10.4 |
| -OIL | NA | NA | NA | NA | NA | .6 | .6 | .5 | 1.7 | 6.3 |
| COKE PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS FUEL OIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | .0 |
| CEMENT PLANTS | .0 | .0 | NA | 1.1 | 1.2 | 1.1 | 1.7 | .9 | 1.1 | .8 |
| WILD FIRES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| MISCELLANEOUS | 11.5 | 11.5 | 11.5 | 11.5 | 11.5 | 12.3 | 12.8 | 12.3 | 11.6 | 15.4 |

TABLE 6. NOX EMISSIONS (1000 TONS) 1950-1980 IOWA

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | |
| ELECTRIC UTILITIES | 19.8 | 18.5 | 24.4 | 31.7 | 48.2 | 63.9 | 106.6 | 126.4 |
| INDUSTRIAL BOILERS | 16.7 | 15.6 | 18.7 | 22.8 | 16.7 | 10.3 | 12.6 | 14.1 |
| COMMERCIAL-RESIDENTIAL | 6.5 | 4.1 | 4.5 | 2.4 | 1.0 | .5 | .3 | .4 |
| ANTHRACITE COAL | | | | | | | | |
| ALL USES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .3 |
| RESIDUAL OIL | | | | | | | | |
| ELECTRIC UTILITIES | .1 | .0 | .0 | .0 | .1 | .0 | .0 | .0 |
| INDUSTRIAL | .3 | .3 | .5 | .2 | .1 | .1 | .0 | .3 |
| COMMERCIAL | .0 | .0 | .2 | .2 | .1 | .2 | .3 | .0 |
| DISTILLATE OIL | | | | | | | | |
| ELECTRIC UTILITIES | 1.5 | .8 | .5 | .3 | .6 | .9 | 1.6 | .1 |
| INDUSTRIAL | .1 | .1 | .1 | .4 | .2 | .5 | .9 | .5 |
| COMMERCIAL-RESIDENTIAL | .8 | .9 | 4.2 | 3.4 | 2.9 | 2.3 | 2.3 | 1.3 |
| NATURAL GAS | | | | | | | | |
| ELECTRIC UTILITIES | 4.3 | 9.9 | 11.9 | 10.9 | 19.0 | 11.5 | 2.0 | 1.7 |
| INDUSTRIAL | 13.2 | 27.2 | 16.0 | 23.6 | 6.9 | 8.5 | 6.7 | 8.0 |
| PIPELINES | 7.0 | 8.3 | 11.2 | 13.8 | 22.9 | 20.1 | 6.2 | 15.9 |
| COMMERCIAL-RESIDENTIAL | 1.3 | 2.7 | 4.3 | 5.8 | 7.7 | 8.1 | 6.5 | 6.8 |
| WOOD | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | .2 | .2 | .2 | .2 | .3 | .4 | .5 | .5 |
| COMMERCIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDENTIAL | .4 | .3 | .3 | .2 | .2 | .2 | .2 | .2 |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE | 50.0 | 56.8 | 62.3 | 71.4 | 87.6 | 92.0 | 82.2 | 72.7 |
| DIESEL | 1.3 | 1.8 | 3.8 | 6.8 | 24.2 | 28.9 | 37.8 | 38.8 |
| OTHER | | | | | | | | |
| RAILROADS-COAL | 5.6 | 1.8 | .4 | .2 | .1 | .0 | .0 | .0 |
| -OIL | 15.8 | 22.0 | 10.1 | 6.8 | 9.7 | 13.6 | 10.3 | 11.8 |
| COKE PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS-DISTILLATE | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -RESIDUAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| OFF HIGHWAY DIESEL | 1.4 | 1.7 | 6.0 | 9.8 | 14.6 | 9.8 | 9.4 | 2.5 |
| CEMENT PLANT | 1.8 | 2.5 | 3.1 | 3.3 | 3.3 | 2.9 | 3.3 | 2.7 |
| WILD FIRES | .1 | .0 | .0 | .0 | .1 | .1 | .1 | .5 |
| MISCELLANEOUS | 19.4 | 17.0 | 14.7 | 14.9 | 14.9 | 8.7 | 7.6 | 6.8 |

TABLE 5. NOX EMISSIONS (1000 TONS) 1900-1945 KANSAS

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | | | |
| ELECTRIC UTILITIES | 1.4 | 2.3 | 3.1 | 4.1 | 4.6 | 4.7 | 4.0 | 2.5 | 3.4 | 4.1 |
| INDUSTRIAL BOILERS | 8.0 | 10.1 | 11.5 | 12.3 | 11.6 | 11.0 | 8.4 | 6.0 | 5.9 | 5.8 |
| COMMERCIAL-RESIDENTIAL | 3.0 | 4.0 | 4.7 | 5.7 | 5.7 | 6.5 | 6.4 | 4.4 | 3.8 | 4.1 |
| ANTHRACITE COAL | | | | | | | | | | |
| ALL USES | .1 | .2 | .2 | .2 | .2 | .2 | NA | NA | NA | NA |
| RESIDUAL OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .3 | .2 | .2 | .2 | .4 |
| INDUSTRIAL | NA | NA | NA | NA | NA | 2.6 | 2.5 | 2.4 | 3.2 | 2.5 |
| COMMERCIAL | NA | NA | NA | NA | NA | .0 | .0 | .1 | .0 | .0 |
| DISTILLATE OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .2 | .1 | .1 | .2 | .3 |
| INDUSTRIAL | NA | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .1 |
| COMMERCIAL-RESIDENTIAL | NA | NA | NA | NA | NA | .0 | .1 | .1 | .1 | .3 |
| NATURAL GAS | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | .6 | 1.2 | 3.1 | 2.9 | 4.3 | 6.4 |
| INDUSTRIAL | NA | NA | 34.9 | 16.9 | 11.8 | 23.1 | 27.0 | 17.7 | 24.7 | 50.1 |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | 1.2 | 1.0 | .7 | .5 | .9 | .7 | 1.4 | 1.9 |
| WOOD | | | | | | | | | | |
| ALL USES | .4 | .4 | .4 | .4 | .3 | .3 | .3 | .3 | .3 | .3 |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE | .0 | .0 | .3 | 1.6 | 5.6 | 12.0 | 18.8 | 18.3 | 21.5 | 19.0 |
| DIESEL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL | 11.4 | 15.0 | 16.7 | 16.5 | 16.9 | 13.6 | 11.3 | 8.6 | 9.0 | 12.3 |
| -OIL | NA | NA | NA | NA | NA | 43.0 | 40.4 | 33.1 | 32.4 | 64.4 |
| COKE PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS FUEL OIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CEMENT PLANTS | .0 | NA | 1.4 | .9 | 1.1 | 1.6 | 1.5 | .6 | .8 | .7 |
| WILD FIRES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | 8.3 | 8.9 | 9.5 | 9.6 | 9.7 | 10.3 | 10.8 | 10.4 | 10.0 | 13.1 |

TABLE 6. NOX EMISSIONS (1000 TONS) 1950-1980 KANSAS

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | |
| ELECTRIC UTILITIES | 4.7 | 4.7 | 5.0 | 5.5 | 12.6 | 37.0 | 85.0 | 143.7 |
| INDUSTRIAL BOILERS | 3.0 | 2.8 | 3.4 | 1.9 | .9 | 1.1 | .9 | 3.2 |
| COMMERCIAL-RESIDENTIAL | .9 | .6 | .9 | .2 | .0 | .0 | .0 | .0 |
| ANTHRACITE COAL | | | | | | | | |
| ALL USES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDUAL OIL | | | | | | | | |
| ELECTRIC UTILITIES | .5 | .6 | .2 | .2 | .6 | 4.4 | 4.2 | .1 |
| INDUSTRIAL | 2.0 | 2.7 | 2.0 | .6 | .6 | 1.9 | 3.2 | 1.2 |
| COMMERCIAL | .0 | .0 | .1 | .1 | .1 | .3 | .2 | .0 |
| DISTILLATE OIL | | | | | | | | |
| ELECTRIC UTILITIES | .6 | .3 | .2 | .2 | .3 | 3.1 | 2.0 | .1 |
| INDUSTRIAL | .2 | .1 | .1 | .1 | .5 | .4 | .5 | .5 |
| COMMERCIAL-RESIDENTIAL | .4 | .6 | .4 | .9 | .3 | .5 | 1.0 | .2 |
| NATURAL GAS | | | | | | | | |
| ELECTRIC UTILITIES | 9.7 | 14.7 | 20.1 | 25.1 | 41.2 | 31.3 | 28.9 | 24.8 |
| INDUSTRIAL | 64.1 | 65.1 | 44.8 | 54.6 | 11.4 | 8.7 | 10.1 | 11.6 |
| PIPELINES | 11.7 | 43.2 | 53.5 | 62.1 | 117.8 | 120.6 | 117.1 | 96.1 |
| COMMERCIAL-RESIDENTIAL | 3.3 | 4.4 | 5.7 | 6.3 | 7.5 | 7.5 | 8.2 | 7.2 |
| WOOD | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | .0 | .0 | .0 | .1 | .1 | .3 | .4 | .4 |
| COMMERCIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDENTIAL | .4 | .3 | .3 | .2 | .1 | .2 | .2 | .2 |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE | 36.3 | 44.2 | 49.4 | 59.5 | 64.0 | 72.6 | 71.7 | 65.9 |
| DIESEL | 1.9 | 2.4 | 1.8 | 5.6 | 17.2 | 20.3 | 23.2 | 33.5 |
| OTHER | | | | | | | | |
| RAILROADS-COAL | 6.7 | 2.2 | .5 | .2 | .1 | .0 | .0 | .0 |
| -OIL | 40.6 | 32.7 | 21.8 | 20.0 | 18.8 | 18.4 | 27.9 | 38.0 |
| COKE PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS-DISTILLATE | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -RESIDUAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| OFF HIGHWAY DIESEL | 1.7 | 1.9 | 5.5 | 7.0 | 12.2 | 14.5 | 21.0 | 4.0 |
| CEMENT PLANT | 2.1 | 2.3 | 2.0 | 2.2 | 2.2 | 2.4 | 2.7 | 2.6 |
| WILD FIRES | NA | NA | NA | 3.0 | 2.1 | 1.3 | 5.0 | 6.5 |
| MISCELLANEOUS | 16.2 | 15.2 | 14.4 | 15.5 | 16.4 | 11.2 | 10.6 | 9.6 |

TABLE 5. NOX EMISSIONS (1000 TONS) 1900-1945 KENTUCKY

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | | | |
| ELECTRIC UTILITIES | 1.9 | 3.1 | 4.3 | 5.7 | 6.6 | 7.1 | 8.1 | 7.6 | 14.7 | 25.4 |
| INDUSTRIAL BOILERS | 12.1 | 15.8 | 18.4 | 20.6 | 22.8 | 27.0 | 24.0 | 19.7 | 22.2 | 25.5 |
| COMMERCIAL-RESIDENTIAL | 2.8 | 3.8 | 4.6 | 5.8 | 5.9 | 6.7 | 7.0 | 5.4 | 5.3 | 7.0 |
| ANTHRACITE COAL | | | | | | | | | | |
| ALL USES | .1 | .1 | .2 | .2 | .2 | .1 | NA | NA | NA | NA |
| RESIDUAL OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | NA | NA | NA | NA | .0 |
| INDUSTRIAL | NA | NA | NA | NA | NA | .4 | .4 | .4 | .6 | .6 |
| COMMERCIAL | NA | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .0 |
| DISTILLATE OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .0 | .0 | .0 | .1 | .1 |
| INDUSTRIAL | NA | NA | NA | NA | NA | .0 | .0 | .0 | .1 | .2 |
| COMMERCIAL-RESIDENTIAL | NA | NA | NA | NA | NA | .0 | .0 | .0 | .1 | .1 |
| NATURAL GAS | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDUSTRIAL | NA | NA | 1.4 | 1.7 | 3.5 | 4.4 | 3.1 | 2.3 | 3.2 | 4.3 |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | .1 | .2 | .5 | .6 | .5 | .3 | .6 | .8 |
| WOOD | | | | | | | | | | |
| ALL USES | 2.2 | 2.1 | 2.0 | 1.9 | 1.8 | 1.7 | 1.6 | 1.6 | 1.5 | 1.4 |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE | .0 | .0 | .2 | .8 | 2.8 | 5.9 | 9.9 | 11.9 | 17.5 | 16.6 |
| DIESEL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL | 6.0 | 8.1 | 9.4 | 9.6 | 10.6 | 9.3 | 8.5 | 7.0 | 8.0 | 12.2 |
| -OIL | NA | NA | NA | NA | NA | .4 | .4 | .3 | 1.0 | 2.4 |
| COKE PLANTS | .1 | .1 | .2 | .2 | .1 | .0 | .0 | .0 | .1 | .1 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS FUEL OIL | NA | NA | NA | NA | NA | 1.1 | 1.3 | 1.0 | .9 | 1.4 |
| CEMENT PLANTS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| WILD FIRES | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 13.6 | .3 | 9.5 | 4.7 |
| MISCELLANEOUS | 11.5 | 11.9 | 12.4 | 12.5 | 12.5 | 13.5 | 14.3 | 13.6 | 12.7 | 17.6 |

TABLE 6. NOX EMISSIONS (1000 TONS) 1950-1980 KENTUCKY

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | |
| ELECTRIC UTILITIES | 18.3 | 63.3 | 85.9 | 140.4 | 219.7 | 295.8 | 276.8 | 287.1 |
| INDUSTRIAL BOILERS | 21.1 | 19.7 | 17.2 | 23.0 | 22.5 | 12.6 | 15.5 | 18.5 |
| COMMERCIAL-RESIDENTIAL | 3.9 | 2.5 | 3.4 | 2.3 | 3.0 | .8 | .7 | 1.3 |
| ANTHRACITE COAL | | | | | | | | |
| ALL USES | .0 | .0 | .3 | .5 | .0 | .0 | .0 | .8 |
| RESIDUAL OIL | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .1 | .0 | .0 | .0 |
| INDUSTRIAL | 1.2 | .6 | .3 | .6 | .7 | 2.1 | 2.2 | 1.0 |
| COMMERCIAL | .0 | .0 | .0 | .0 | .1 | .4 | .3 | .1 |
| DISTILLATE OIL | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .2 | .4 | .4 |
| INDUSTRIAL | .2 | .1 | .4 | .3 | .5 | .8 | 1.2 | 1.7 |
| COMMERCIAL-RESIDENTIAL | .4 | .6 | .9 | 1.5 | 2.0 | 1.4 | 2.1 | 2.3 |
| NATURAL GAS | | | | | | | | |
| ELECTRIC UTILITIES | .8 | 1.5 | .6 | .1 | 2.1 | .1 | .3 | .5 |
| INDUSTRIAL | 8.0 | 18.8 | 17.6 | 15.6 | 5.1 | 4.5 | 3.9 | 4.5 |
| PIPELINES | 8.2 | 13.3 | 23.7 | 34.5 | 47.6 | 30.9 | 30.3 | 27.4 |
| COMMERCIAL-RESIDENTIAL | 1.7 | 2.7 | 4.1 | 4.3 | 6.4 | 5.9 | 6.6 | 5.7 |
| WOOD | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | .4 | .5 | .5 | .7 | .9 | 1.4 | 1.4 | 1.5 |
| COMMERCIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDENTIAL | 1.9 | 1.5 | 1.2 | .9 | .8 | .9 | 1.4 | 1.9 |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE | 37.1 | 47.7 | 55.4 | 70.1 | 96.0 | 116.0 | 117.9 | 96.3 |
| DIESEL | 1.5 | 1.9 | 1.3 | 2.6 | 11.8 | 21.4 | 31.7 | 36.2 |
| OTHER | | | | | | | | |
| RAILROADS-COAL | 6.7 | 2.1 | .4 | .0 | .0 | .0 | .0 | .0 |
| -OIL | 4.0 | 8.1 | 13.9 | 13.5 | 10.5 | 14.5 | 22.4 | 28.7 |
| COKE PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS-DISTILLATE | .2 | .8 | 1.0 | 1.2 | 1.8 | 1.6 | 3.1 | 6.1 |
| -RESIDUAL | .1 | .4 | .0 | .0 | .0 | .0 | .0 | .0 |
| OFF HIGHWAY DIESEL | 3.3 | 3.3 | 4.6 | 6.5 | 5.1 | 9.5 | 20.4 | 26.5 |
| CEMENT PLANT | .5 | .6 | .7 | .7 | .2 | .2 | 1.2 | 1.0 |
| WILD FIRES | 5.1 | 5.2 | 2.8 | 1.2 | 1.0 | .4 | .7 | 6.6 |
| MISCELLANEOUS | 23.2 | 20.3 | 17.8 | 19.1 | 20.0 | 12.5 | 11.3 | 10.1 |

TABLE 5. NOX EMISSIONS (1000 TONS) 1900-1945 LOUISIANA

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | | | |
| ELECTRIC UTILITIES | .5 | .9 | 1.2 | 1.6 | 2.1 | 2.9 | 2.7 | 1.6 | 2.0 | 2.0 |
| INDUSTRIAL BOILERS | 4.7 | 6.5 | 8.1 | 9.8 | 8.0 | 4.3 | 2.0 | 1.3 | 1.1 | .9 |
| COMMERCIAL-RESIDENTIAL | .4 | .6 | .8 | 1.1 | 1.2 | 1.3 | 1.3 | .9 | .7 | .7 |
| ANTHRACITE COAL | | | | | | | | | | |
| ALL USES | .1 | .1 | .1 | .1 | .1 | .1 | NA | NA | NA | NA |
| RESIDUAL OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .5 | .4 | .4 | .2 | .3 |
| INDUSTRIAL | NA | NA | NA | NA | NA | 1.6 | 1.6 | 1.6 | 1.0 | 1.3 |
| COMMERCIAL | NA | NA | NA | NA | NA | .1 | .2 | .4 | .7 | 3.1 |
| DISTILLATE OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .1 | .1 | .0 | .2 | .1 |
| INDUSTRIAL | NA | NA | NA | NA | NA | .1 | .1 | .1 | .1 | .2 |
| COMMERCIAL-RESIDENTIAL | NA | NA | NA | NA | NA | .1 | .1 | .2 | .3 | 1.0 |
| NATURAL GAS | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | .8 | 1.7 | 4.6 | 4.4 | 6.4 | 10.4 |
| INDUSTRIAL | NA | NA | NA | 13.0 | 24.8 | 84.6 | 92.9 | 48.9 | 68.3 | 123.6 |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | NA | .2 | .2 | .3 | .4 | .4 | .8 | 1.2 |
| WOOD | | | | | | | | | | |
| ALL USES | 2.8 | 2.6 | 2.5 | 2.4 | 2.3 | 2.2 | 2.1 | 2.0 | 1.9 | 1.8 |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE | .0 | .0 | .2 | .9 | 3.1 | 6.8 | 10.7 | 10.8 | 15.4 | 16.3 |
| DIESEL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL | 4.3 | 6.1 | 7.7 | 8.5 | 9.2 | 7.4 | 6.2 | 4.7 | 4.9 | 6.7 |
| -OIL | NA | NA | NA | NA | NA | 38.9 | 36.6 | 30.0 | 25.6 | 30.8 |
| COKE PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS FUEL OIL | NA | NA | NA | NA | NA | 41.6 | 49.4 | 39.1 | 37.2 | 23.2 |
| CEMENT PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | NA | NA | NA | NA |
| WILD FIRES | 11.0 | 11.0 | 11.0 | 11.0 | 11.0 | 11.0 | 29.9 | 22.7 | 11.4 | 11.3 |
| MISCELLANEOUS | 18.9 | 20.7 | 22.8 | 24.1 | 25.0 | 27.7 | 29.9 | 29.5 | 29.0 | 41.9 |

TABLE 6. NOX EMISSIONS (1000 TONS) 1950-1980 LOUISIANA

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .4 | 32.5 |
| INDUSTRIAL BOILERS | .0 | .9 | .5 | .5 | .0 | .0 | 1.6 | 1.0 |
| COMMERCIAL-RESIDENTIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| ANTHRACITE COAL | | | | | | | | |
| ALL USES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDUAL OIL | | | | | | | | |
| ELECTRIC UTILITIES | .1 | .0 | .1 | .0 | .5 | 6.0 | 26.3 | 6.2 |
| INDUSTRIAL | 1.2 | 1.2 | .7 | .5 | 1.2 | 5.9 | 11.7 | 14.0 |
| COMMERCIAL | .4 | .1 | .0 | .0 | .6 | 1.4 | 1.8 | 9.3 |
| DISTILLATE OIL | | | | | | | | |
| ELECTRIC UTILITIES | .2 | .1 | .1 | .1 | .1 | 2.2 | 5.1 | 3.7 |
| INDUSTRIAL | .4 | .6 | 1.4 | 1.7 | 1.2 | 2.8 | 3.9 | 3.7 |
| COMMERCIAL-RESIDENTIAL | .7 | 1.2 | .7 | .4 | 1.3 | 1.8 | 1.9 | .4 |
| NATURAL GAS | | | | | | | | |
| ELECTRIC UTILITIES | 14.9 | 17.3 | 29.4 | 45.7 | 81.0 | 87.3 | 90.4 | 104.1 |
| INDUSTRIAL | 164.3 | 245.9 | 223.6 | 238.3 | 69.7 | 64.6 | 67.9 | 69.0 |
| PIPELINES | 11.2 | 24.2 | 190.0 | 324.6 | 448.2 | 453.6 | 799.5 | 337.9 |
| COMMERCIAL-RESIDENTIAL | 1.8 | 2.7 | 4.0 | 4.2 | 7.8 | 8.3 | 7.4 | 5.7 |
| WOOD | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | 1.6 | 1.9 | 2.1 | 2.3 | 2.6 | 2.6 | 2.9 | 2.7 |
| COMMERCIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDENTIAL | 1.2 | .9 | .7 | .5 | .4 | .4 | .5 | .5 |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE | 32.8 | 45.4 | 55.4 | 71.5 | 80.5 | 95.2 | 95.7 | 93.1 |
| DIESEL | 2.3 | 3.0 | 7.4 | 4.7 | 13.6 | 23.2 | 36.6 | 41.5 |
| OTHER | | | | | | | | |
| RAILROADS-COAL | 3.6 | 1.2 | .3 | .1 | .1 | .0 | .0 | .0 |
| -OIL | 14.2 | 9.9 | 7.8 | 8.5 | 7.4 | 19.0 | 19.8 | 16.6 |
| COKE PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS-DISTILLATE | 3.4 | 4.1 | 6.7 | 4.9 | 6.4 | 10.6 | 10.6 | 6.7 |
| -RESIDUAL | 9.4 | 10.7 | 9.6 | 8.2 | 10.8 | 18.4 | 23.4 | 35.2 |
| OFF HIGHWAY DIESEL | 5.3 | 10.9 | 13.1 | 8.5 | 23.4 | 19.7 | 45.5 | 9.3 |
| CEMENT PLANT | .4 | .8 | 1.2 | 1.5 | 1.3 | 1.4 | 1.6 | 1.7 |
| WILD FIRES | 7.8 | 2.0 | 2.3 | 1.9 | 1.5 | .8 | 1.7 | 1.6 |
| MISCELLANEOUS | 56.4 | 62.9 | 69.7 | 85.9 | 100.4 | 88.1 | 92.3 | 84.1 |

TABLE 5. NOX EMISSIONS (1000 TONS) 1900-1945 MAINE

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | | | |
| ELECTRIC UTILITIES | 1.0 | 1.6 | 2.2 | 2.9 | 3.3 | 3.4 | 2.9 | 1.8 | 2.5 | 3.0 |
| INDUSTRIAL BOILERS | 3.8 | 5.7 | 7.7 | 9.9 | 10.1 | 9.6 | 7.5 | 5.8 | 6.1 | 6.5 |
| COMMERCIAL-RESIDENTIAL | .2 | .2 | .4 | .5 | .5 | .6 | .7 | .6 | .6 | .9 |
| ANTHRACITE COAL | | | | | | | | | | |
| ALL USES | 10.6 | 14.4 | 15.5 | 16.2 | 16.4 | 12.2 | 4.3 | 3.2 | 5.3 | 5.7 |
| RESIDUAL OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .3 | .2 | .2 | .4 | .3 |
| INDUSTRIAL | NA | NA | NA | NA | NA | 1.4 | 1.3 | 1.3 | 1.2 | 1.1 |
| COMMERCIAL | NA | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .0 |
| DISTILLATE OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .0 | .0 | .0 | .1 | .0 |
| INDUSTRIAL | NA | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .0 |
| COMMERCIAL-RESIDENTIAL | NA | NA | NA | NA | NA | .1 | .3 | .4 | .6 | .6 |
| NATURAL GAS | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| WOOD | | | | | | | | | | |
| ALL USES | 2.2 | 2.1 | 2.0 | 1.9 | 1.8 | 1.7 | 1.6 | 1.6 | 1.5 | 1.4 |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE | .0 | .0 | .1 | .5 | 1.6 | 3.5 | 6.3 | 7.1 | 9.2 | 7.7 |
| DIESEL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL | 2.3 | 3.6 | 4.8 | 5.7 | 6.5 | 5.4 | 4.6 | 3.6 | 4.0 | 6.0 |
| -OIL | NA | NA | NA | NA | NA | .1 | .1 | .0 | .1 | .3 |
| COKE PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS FUEL OIL | NA | NA | NA | NA | NA | .2 | .2 | .2 | .2 | 2.8 |
| CEMENT PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | NA | NA | NA | NA |
| WILD FIRES | .1 | .1 | .1 | .1 | .1 | .1 | .7 | .4 | .1 | .1 |
| MISCELLANEOUS | 3.8 | 3.9 | 4.0 | 4.1 | 4.1 | 4.3 | 4.4 | 4.3 | 4.2 | 5.7 |

TABLE 6. NOX EMISSIONS (1000 TONS) 1950-1980 MAINE

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | |
| ELECTRIC UTILITIES | .1 | .0 | .2 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL BOILERS | .0 | .1 | .2 | 1.2 | .2 | .2 | .1 | 1.0 |
| COMMERCIAL-RESIDENTIAL | .0 | .0 | .0 | .2 | .0 | .0 | .0 | .1 |
| ANTHRACITE COAL | | | | | | | | |
| ALL USES | 2.0 | 1.2 | 1.8 | .8 | .1 | .0 | .0 | .1 |
| RESIDUAL OIL | | | | | | | | |
| ELECTRIC UTILITIES | 1.5 | 2.0 | 2.7 | 5.5 | 5.8 | 3.3 | 2.1 | 4.2 |
| INDUSTRIAL | 2.2 | 2.0 | 1.7 | 1.1 | 2.9 | 4.7 | 7.3 | 4.7 |
| COMMERCIAL | .0 | .1 | .7 | .2 | 1.6 | 1.2 | 1.7 | .4 |
| DISTILLATE OIL | | | | | | | | |
| ELECTRIC UTILITIES | .2 | .2 | .2 | .3 | .2 | .3 | .1 | .1 |
| INDUSTRIAL | .1 | .1 | .1 | .2 | .3 | .2 | .3 | .3 |
| COMMERCIAL-RESIDENTIAL | 1.2 | 1.3 | 3.2 | 3.8 | 4.7 | 4.2 | 4.7 | 3.5 |
| NATURAL GAS | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .1 |
| PIPELINES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .1 |
| COMMERCIAL-RESIDENTIAL | .0 | .0 | .0 | .0 | .1 | .1 | .1 | .1 |
| WOOD | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | 1.1 | 1.3 | 1.4 | 1.7 | 1.8 | 1.9 | 2.4 | 2.4 |
| COMMERCIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDENTIAL | 1.1 | .9 | .7 | .5 | .4 | .5 | .9 | 1.2 |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE | 15.1 | 18.9 | 21.9 | 25.3 | 29.5 | 32.7 | 33.8 | 28.7 |
| DIESEL | .4 | .5 | .5 | 1.9 | 4.1 | 5.6 | 8.1 | 8.3 |
| OTHER | | | | | | | | |
| RAILROADS-COAL | 2.6 | .5 | .1 | .0 | .0 | .0 | .0 | .0 |
| -OIL | 2.5 | 4.4 | 3.0 | 2.2 | 3.0 | 2.4 | 1.9 | 1.5 |
| COKE PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS-DISTILLATE | .1 | .1 | .2 | .1 | .1 | .2 | .2 | .1 |
| -RESIDUAL | .2 | .5 | .6 | .5 | 1.7 | 1.1 | .4 | .3 |
| OFF HIGHWAY DIESEL | .6 | .7 | .9 | .8 | 1.6 | 1.5 | .8 | 1.5 |
| CEMENT PLANT | .2 | .3 | .3 | .4 | .6 | .4 | .4 | .4 |
| WILD FIRES | .4 | .0 | .1 | .4 | .0 | .0 | .1 | .1 |
| MISCELLANEOUS | 7.3 | 6.4 | 5.6 | 6.0 | 6.4 | 4.1 | 3.8 | 3.4 |

TABLE 5. NOX EMISSIONS (1000 TONS) 1900-1945 MARYLAND

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | | | |
| ELECTRIC UTILITIES | 1.2 | 1.9 | 2.6 | 3.5 | 4.4 | 5.6 | 6.1 | 4.9 | 8.6 | 13.8 |
| INDUSTRIAL BOILERS | 12.9 | 16.9 | 19.9 | 22.3 | 20.6 | 17.6 | 14.3 | 12.8 | 15.5 | 19.1 |
| COMMERCIAL-RESIDENTIAL | .5 | .7 | .9 | 1.1 | 1.1 | 1.3 | 1.6 | 1.5 | 1.9 | 3.0 |
| ANTHRACITE COAL | | | | | | | | | | |
| ALL USES | 6.8 | 9.3 | 10.0 | 10.5 | 10.6 | 7.9 | 3.7 | 2.8 | 4.7 | 6.5 |
| RESIDUAL OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .7 | .6 | .5 | .7 | .9 |
| INDUSTRIAL | NA | NA | NA | NA | NA | 4.8 | 4.6 | 4.6 | 4.9 | 6.2 |
| COMMERCIAL | NA | NA | NA | NA | NA | .0 | .1 | .1 | .3 | .4 |
| DISTILLATE OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .1 |
| INDUSTRIAL | NA | NA | NA | NA | NA | .1 | .1 | .1 | .1 | .2 |
| COMMERCIAL-RESIDENTIAL | NA | NA | NA | NA | NA | .1 | .1 | .2 | .3 | .6 |
| NATURAL GAS | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | .0 | .0 | .0 | NA | NA | NA |
| INDUSTRIAL | NA | NA | .0 | .0 | .0 | .0 | NA | 1.8 | 2.5 | .6 |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | .0 | .0 | .0 | NA | NA | .2 | .3 | .5 |
| WOOD | | | | | | | | | | |
| ALL USES | 1.8 | 1.8 | 1.7 | 1.6 | 1.5 | 1.5 | 1.4 | 1.3 | 1.3 | 1.2 |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE | .0 | .0 | .2 | .8 | 2.9 | 6.3 | 10.9 | 12.8 | 18.1 | 16.4 |
| DIESEL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL | 4.9 | 6.7 | 7.8 | 8.0 | 8.9 | 7.8 | 7.1 | 5.8 | 6.7 | 10.2 |
| -OIL | NA | NA | NA | NA | NA | .6 | .5 | .4 | .8 | 1.9 |
| COKE PLANTS | .1 | .1 | .1 | .1 | .1 | .2 | .2 | .2 | .4 | .5 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS FUEL OIL | NA | NA | NA | NA | NA | 23.6 | 28.0 | 22.2 | 27.6 | 45.3 |
| CEMENT PLANTS | .0 | .0 | NA | NA | NA | NA | NA | NA | NA | NA |
| WILD FIRES | .8 | .8 | .8 | .8 | .8 | .8 | 2.3 | .2 | .4 | .2 |
| MISCELLANEOUS | 6.7 | 7.0 | 7.4 | 7.5 | 7.5 | 8.5 | 9.4 | 8.6 | 7.7 | 12.4 |

TABLE 6. NOX EMISSIONS (1000 TONS) 1950-1980 MARYLAND

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | |
| ELECTRIC UTILITIES | 19.4 | 22.7 | 35.5 | 69.2 | 71.6 | 45.8 | 52.7 | 76.2 |
| INDUSTRIAL BOILERS | 7.3 | 6.8 | 8.3 | 11.4 | 8.3 | 2.8 | 5.9 | 6.8 |
| COMMERCIAL-RESIDENTIAL | .7 | .4 | .9 | .8 | .3 | .1 | .0 | .2 |
| ANTHRACITE COAL | | | | | | | | |
| ALL USES | 4.5 | 3.0 | 2.2 | 2.0 | .8 | .1 | .1 | .1 |
| RESIDUAL OIL | | | | | | | | |
| ELECTRIC UTILITIES | 1.1 | .1 | .2 | .6 | 12.4 | 19.6 | 22.6 | 9.3 |
| INDUSTRIAL | 7.6 | 8.8 | 9.2 | 6.0 | 3.0 | 3.3 | 3.1 | 3.0 |
| COMMERCIAL | .2 | .1 | 2.5 | 2.4 | 3.2 | 2.2 | 2.0 | .7 |
| DISTILLATE OIL | | | | | | | | |
| ELECTRIC UTILITIES | .1 | .3 | .5 | .3 | 1.7 | 3.1 | 2.3 | 2.9 |
| INDUSTRIAL | .2 | .5 | .2 | .5 | .8 | 1.0 | 1.6 | 1.3 |
| COMMERCIAL-RESIDENTIAL | .7 | .9 | 4.8 | 5.5 | 6.1 | 5.5 | 5.1 | 5.2 |
| NATURAL GAS | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | 2.8 | .1 | .1 | 1.3 |
| INDUSTRIAL | 1.0 | 3.3 | 6.0 | 9.6 | 2.8 | 2.7 | 2.2 | 3.8 |
| PIPELINES | .0 | 1.1 | 1.1 | 1.5 | 2.5 | 2.7 | 2.3 | 4.9 |
| COMMERCIAL-RESIDENTIAL | .6 | 1.6 | 2.4 | 3.3 | 4.6 | 4.4 | 4.5 | 4.8 |
| WOOD | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | .9 | 1.0 | 1.1 | 1.4 | 1.7 | 1.6 | 2.0 | 2.0 |
| COMMERCIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDENTIAL | 1.1 | .8 | .7 | .5 | .6 | .7 | 1.1 | 1.4 |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE | 30.3 | 42.2 | 51.9 | 67.5 | 97.0 | 117.0 | 115.7 | 107.4 |
| DIESEL | 1.2 | 1.7 | 3.8 | 10.4 | 11.0 | 15.0 | 18.9 | 23.9 |
| OTHER | | | | | | | | |
| RAILROADS-COAL | 5.6 | 1.7 | .4 | .0 | .0 | .0 | .0 | .0 |
| -OIL | 5.0 | 9.0 | 8.8 | 13.3 | 12.9 | 9.9 | 7.7 | 6.5 |
| COKE PLANTS | .1 | .1 | .1 | .1 | .1 | .1 | .1 | .1 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS-DISTILLATE | .9 | 1.4 | .8 | .2 | .7 | .8 | 1.1 | 1.2 |
| -RESIDUAL | 6.2 | 6.0 | 4.5 | 3.8 | 4.4 | 2.8 | 4.0 | 5.5 |
| OFF HIGHWAY DIESEL | 1.2 | 1.6 | 1.8 | 4.1 | 5.3 | 5.9 | 5.6 | 5.3 |
| CEMENT PLANT | .8 | .9 | 1.4 | 1.7 | 1.9 | 1.6 | 2.0 | 1.9 |
| WILD FIRES | .1 | .0 | .0 | .0 | .0 | .0 | .0 | .4 |
| MISCELLANEOUS | 19.0 | 15.5 | 12.4 | 19.4 | 23.7 | 12.3 | 9.8 | 7.8 |

TABLE 5. NOX EMISSIONS (1000 TONS) 1900-1945 MASSACHUSETTS

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | | | |
| ELECTRIC UTILITIES | 4.8 | 8.0 | 10.9 | 14.5 | 16.7 | 17.9 | 15.8 | 10.4 | 14.8 | 19.1 |
| INDUSTRIAL BOILERS | 34.6 | 43.8 | 49.8 | 53.6 | 51.8 | 51.0 | 39.3 | 28.5 | 28.0 | 27.7 |
| COMMERCIAL-RESIDENTIAL | 1.4 | 1.9 | 2.2 | 2.7 | 2.7 | 3.1 | 3.5 | 3.0 | 3.3 | 4.8 |
| ANTHRACITE COAL | | | | | | | | | | |
| ALL USES | 10.6 | 14.4 | 15.5 | 16.2 | 16.4 | 12.2 | 4.3 | 3.2 | 5.3 | 5.7 |
| RESIDUAL OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | 1.7 | 1.3 | 1.2 | 1.8 | 2.0 |
| INDUSTRIAL | NA | NA | NA | NA | NA | 8.0 | 7.6 | 7.5 | 7.3 | 5.4 |
| COMMERCIAL | NA | NA | NA | NA | NA | .1 | .1 | .2 | .3 | .5 |
| DISTILLATE OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .6 | .5 | .4 | .4 | .6 |
| INDUSTRIAL | NA | NA | NA | NA | NA | .4 | .3 | .3 | .2 | .3 |
| COMMERCIAL-RESIDENTIAL | NA | NA | NA | NA | NA | 1.4 | 2.3 | 3.8 | 5.3 | 4.5 |
| NATURAL GAS | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| WOOD | | | | | | | | | | |
| ALL USES | 3.0 | 2.8 | 2.7 | 2.6 | 2.5 | 2.3 | 2.2 | 2.1 | 2.1 | 1.9 |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE | .0 | .1 | .6 | 3.1 | 10.8 | 23.2 | 32.6 | 36.1 | 44.1 | 32.9 |
| DIESEL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL | 8.2 | 10.8 | 12.2 | 12.0 | 12.6 | 10.4 | 9.0 | 7.0 | 7.9 | 11.7 |
| -OIL | NA | NA | NA | NA | NA | .3 | .2 | .2 | .4 | 2.3 |
| COKE PLANTS | .0 | .0 | .1 | .0 | .1 | .1 | .1 | .1 | .1 | .1 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS FUEL OIL | NA | NA | NA | NA | NA | 15.3 | 18.2 | 14.4 | 12.7 | 29.5 |
| CEMENT PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| WILD FIRES | .5 | .5 | .5 | .5 | .5 | .5 | 1.6 | .6 | .4 | .2 |
| MISCELLANEOUS | 14.3 | 15.6 | 17.1 | 17.1 | 17.2 | 19.7 | 21.7 | 19.6 | 17.2 | 24.6 |

TABLE 6. NOX EMISSIONS (1000 TONS) 1950-1980 MASSACHUSETTS

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | |
| ELECTRIC UTILITIES | 11.7 | 21.8 | 28.1 | 46.8 | 5.1 | 3.3 | .0 | 3.6 |
| INDUSTRIAL BOILERS | .0 | 6.6 | 9.9 | 5.5 | 1.3 | .9 | .6 | .9 |
| COMMERCIAL-RESIDENTIAL | .7 | .4 | 2.0 | .5 | .1 | .1 | .0 | .5 |
| ANTHRACITE COAL | | | | | | | | |
| ALL USES | 15.8 | 7.7 | 1.9 | .8 | .4 | .1 | .1 | .5 |
| RESIDUAL OIL | | | | | | | | |
| ELECTRIC UTILITIES | 13.6 | 10.1 | 12.5 | 15.3 | 50.8 | 48.2 | 58.2 | 53.4 |
| INDUSTRIAL | 11.7 | 13.6 | 12.8 | 10.3 | 11.3 | 6.3 | 6.3 | 2.8 |
| COMMERCIAL | .2 | .3 | 9.1 | 16.3 | 18.0 | 11.6 | 9.8 | 2.7 |
| DISTILLATE OIL | | | | | | | | |
| ELECTRIC UTILITIES | 1.9 | .3 | .5 | .5 | 2.0 | .7 | .8 | .7 |
| INDUSTRIAL | .4 | .6 | .5 | .7 | .6 | .6 | .9 | 1.0 |
| COMMERCIAL-RESIDENTIAL | 5.4 | 4.6 | 21.1 | 22.3 | 22.0 | 20.8 | 20.7 | 12.2 |
| NATURAL GAS | | | | | | | | |
| ELECTRIC UTILITIES | .0 | 2.1 | 2.6 | 2.5 | 1.4 | .4 | .4 | 1.2 |
| INDUSTRIAL | .0 | 4.7 | 4.5 | 7.4 | 1.6 | 1.7 | 1.8 | 2.0 |
| PIPELINES | .0 | 1.5 | .3 | .3 | 1.4 | .6 | .6 | .8 |
| COMMERCIAL-RESIDENTIAL | .0 | 1.5 | 2.8 | 4.1 | 4.4 | 6.4 | 6.6 | 7.4 |
| WOOD | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | 1.9 | 2.2 | 2.4 | 2.9 | 3.4 | 2.7 | 3.6 | 3.7 |
| COMMERCIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDENTIAL | 1.1 | .9 | .7 | .6 | .7 | .8 | 1.2 | 1.6 |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE | 50.3 | 60.8 | 71.8 | 85.8 | 121.3 | 132.2 | 141.9 | 130.9 |
| DIESEL | 1.8 | 2.4 | 3.4 | 7.2 | 15.5 | 17.0 | 22.5 | 26.7 |
| OTHER | | | | | | | | |
| RAILROADS-COAL | 5.0 | 1.0 | .1 | .0 | .0 | .0 | .0 | .0 |
| -OIL | 7.8 | 10.8 | 5.7 | 5.7 | 3.2 | 4.0 | .8 | 2.2 |
| COKE PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS-DISTILLATE | 1.0 | .4 | 1.1 | 1.0 | .7 | .8 | 1.1 | .3 |
| -RESIDUAL | 1.3 | 1.1 | .6 | .5 | 2.2 | .8 | 1.0 | 1.1 |
| OFF HIGHWAY DIESEL | 1.8 | 1.8 | 1.2 | 2.3 | 3.1 | 1.8 | 1.1 | 2.0 |
| CEMENT PLANT | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| WILD FIRES | .2 | .2 | .1 | .4 | .1 | .2 | .2 | .2 |
| MISCELLANEOUS | 33.9 | 28.8 | 24.1 | 26.6 | 28.0 | 13.8 | 10.6 | 8.8 |

TABLE 5. NOX EMISSIONS (1000 TONS) 1900-1945 MICHIGAN

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | | | |
| ELECTRIC UTILITIES | 4.7 | 7.9 | 10.7 | 14.3 | 18.3 | 24.0 | 25.0 | 18.8 | 30.9 | 46.7 |
| INDUSTRIAL BOILERS | 23.6 | 36.7 | 51.1 | 67.6 | 80.5 | 95.8 | 87.1 | 74.0 | 86.3 | 102.6 |
| COMMERCIAL-RESIDENTIAL | 2.5 | 4.0 | 5.9 | 8.6 | 9.4 | 10.7 | 12.4 | 11.2 | 12.9 | 19.8 |
| ANTHRACITE COAL | | | | | | | | | | |
| ALL USES | 4.5 | 6.1 | 6.6 | 6.9 | 7.0 | 5.2 | 1.3 | 1.0 | 1.7 | 2.0 |
| RESIDUAL OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .3 | .3 | .2 | .2 | .2 |
| INDUSTRIAL | NA | NA | NA | NA | NA | 6.1 | 5.8 | 5.8 | 5.0 | 4.9 |
| COMMERCIAL | NA | NA | NA | NA | NA | .0 | .0 | .0 | .1 | .1 |
| DISTILLATE OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .1 | .1 | .1 | .3 | .3 |
| INDUSTRIAL | NA | NA | NA | NA | NA | .3 | .3 | .3 | .5 | 1.0 |
| COMMERCIAL-RESIDENTIAL | NA | NA | NA | NA | NA | .0 | .1 | .1 | .2 | .3 |
| NATURAL GAS | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | NA | NA | .0 | .0 | .0 |
| INDUSTRIAL | NA | NA | .0 | .7 | NA | NA | 1.0 | 3.3 | 4.6 | 9.0 |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | .0 | .0 | .0 | .0 | .0 | .6 | 1.2 | 1.9 |
| WOOD | | | | | | | | | | |
| ALL USES | 3.5 | 3.3 | 3.2 | 3.0 | 2.9 | 2.7 | 2.6 | 2.5 | 2.4 | 2.3 |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE | .0 | .1 | .7 | 3.6 | 12.7 | 27.4 | 45.3 | 48.4 | 67.9 | 56.4 |
| DIESEL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL | 5.8 | 9.4 | 13.0 | 15.8 | 16.1 | 15.0 | 12.9 | 10.1 | 11.3 | 16.8 |
| -OIL | NA | NA | NA | NA | NA | .7 | .7 | .5 | .6 | 2.3 |
| COKE PLANTS | .1 | .1 | .1 | .1 | .2 | .3 | .4 | .3 | .5 | .6 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS FUEL OIL | NA | NA | NA | NA | NA | .4 | .5 | .4 | 1.0 | .7 |
| CEMENT PLANTS | .2 | .7 | .9 | 1.2 | 1.2 | 2.7 | 2.8 | 1.1 | 2.1 | 1.4 |
| WILD FIRES | 16.1 | 16.1 | 16.1 | 16.1 | 16.1 | 16.1 | 6.4 | .4 | .4 | .8 |
| MISCELLANEOUS | 12.6 | 13.5 | 14.6 | 14.6 | 14.7 | 20.5 | 25.0 | 20.2 | 14.7 | 27.3 |

TABLE 6. NOX EMISSIONS (1000 TONS) 1950-1980 MICHIGAN

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | |
| ELECTRIC UTILITIES | 74.3 | 103.5 | 118.4 | 185.4 | 267.3 | 250.7 | 243.7 | 264.5 |
| INDUSTRIAL BOILERS | 48.6 | 45.4 | 83.4 | 107.6 | 70.7 | 36.9 | 32.4 | 43.3 |
| COMMERCIAL-RESIDENTIAL | 15.2 | 9.6 | 11.9 | 8.8 | 5.0 | 1.3 | .4 | 1.5 |
| ANTHRACITE COAL | | | | | | | | |
| ALL USES | 3.2 | 1.2 | .5 | .9 | .7 | .5 | .4 | .3 |
| RESIDUAL OIL | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | 5.4 | 17.4 | 21.7 | 10.0 |
| INDUSTRIAL | 10.9 | 12.5 | 8.9 | 6.7 | 4.6 | 2.4 | 3.3 | 3.7 |
| COMMERCIAL | .1 | .3 | 1.6 | .7 | .6 | 1.2 | 2.0 | .1 |
| DISTILLATE OIL | | | | | | | | |
| ELECTRIC UTILITIES | 2.4 | .9 | .7 | .6 | 1.7 | 3.5 | 4.3 | 1.8 |
| INDUSTRIAL | 2.0 | 2.1 | .7 | 1.0 | 1.4 | 1.5 | 2.0 | 1.0 |
| COMMERCIAL-RESIDENTIAL | 1.8 | 2.2 | 11.3 | 11.5 | 11.6 | 11.4 | 11.3 | 5.1 |
| NATURAL GAS | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .1 | 1.3 | .7 | 7.9 | 11.6 | 8.9 | 6.5 |
| INDUSTRIAL | 15.2 | 21.2 | 42.1 | 64.3 | 20.3 | 21.1 | 18.7 | 17.0 |
| PIPELINES | 1.1 | 2.3 | 3.3 | 5.7 | 17.3 | 23.3 | 18.3 | 23.6 |
| COMMERCIAL-RESIDENTIAL | 4.3 | 7.2 | 12.2 | 17.8 | 23.6 | 25.8 | 23.6 | 28.9 |
| WOOD | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | .8 | 1.0 | 1.0 | 1.3 | 1.4 | 1.4 | 2.0 | 1.9 |
| COMMERCIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDENTIAL | 2.9 | 2.2 | 1.8 | 1.4 | 1.3 | 1.3 | 2.2 | 3.1 |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE | 99.2 | 127.6 | 141.5 | 178.6 | 250.4 | 268.4 | 276.7 | 233.0 |
| DIESEL | 2.7 | 3.3 | 4.3 | 10.3 | 26.2 | 36.3 | 53.6 | 43.9 |
| OTHER | | | | | | | | |
| RAILROADS-COAL | 7.3 | 1.5 | .2 | .0 | .0 | .0 | .0 | .0 |
| -OIL | 7.8 | 12.6 | 14.2 | 12.1 | 12.6 | 18.9 | 15.5 | 16.3 |
| COKE PLANTS | .1 | .1 | .1 | .1 | .1 | .1 | .1 | .1 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS-DISTILLATE | .1 | .1 | .1 | .2 | .2 | .3 | .1 | .1 |
| -RESIDUAL | .3 | 1.2 | .6 | .6 | .4 | .4 | .3 | .2 |
| OFF HIGHWAY DIESEL | 1.4 | 2.9 | 5.8 | 14.9 | 15.6 | 13.0 | 13.4 | 5.2 |
| CEMENT PLANT | 3.2 | 4.4 | 5.1 | 6.6 | 7.2 | 6.0 | 7.7 | 6.2 |
| WILD FIRES | .1 | .2 | .1 | .1 | .2 | .4 | .1 | .7 |
| MISCELLANEOUS | 46.8 | 37.2 | 28.6 | 39.0 | 45.1 | 19.4 | 12.9 | 9.0 |

TABLE 5. NOX EMISSIONS (1000 TONS) 1900-1945 MINNESOTA

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | | | |
| ELECTRIC UTILITIES | 1.4 | 2.4 | 3.3 | 4.4 | 4.6 | 3.9 | 3.1 | 2.3 | 3.7 | 5.5 |
| INDUSTRIAL BOILERS | 4.6 | 6.5 | 8.3 | 10.1 | 12.0 | 14.8 | 13.2 | 10.6 | 11.8 | 13.3 |
| COMMERCIAL-RESIDENTIAL | 4.5 | 6.6 | 8.8 | 11.9 | 12.6 | 14.3 | 14.5 | 10.4 | 9.4 | 11.0 |
| ANTHRACITE COAL | | | | | | | | | | |
| ALL USES | 9.0 | 12.2 | 13.1 | 13.8 | 13.9 | 10.4 | .4 | .3 | .5 | .9 |
| RESIDUAL OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .1 | .1 | .1 | .1 | .2 |
| INDUSTRIAL | NA | NA | NA | NA | NA | .4 | .4 | .3 | .3 | .4 |
| COMMERCIAL | NA | NA | NA | NA | NA | .0 | .0 | .1 | .0 | .0 |
| DISTILLATE OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .1 | .1 | .1 | .2 | .2 |
| INDUSTRIAL | NA | NA | NA | NA | NA | .1 | .1 | .1 | .1 | .1 |
| COMMERCIAL-RESIDENTIAL | NA | NA | NA | NA | NA | .0 | .0 | .1 | .3 | .3 |
| NATURAL GAS | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | NA | NA | .4 | .6 | 1.6 |
| INDUSTRIAL | NA | NA | .0 | .0 | .0 | .0 | .0 | 3.4 | 4.7 | 9.9 |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | .0 | .0 | .0 | .0 | .0 | .2 | .4 | .6 |
| WOOD | | | | | | | | | | |
| ALL USES | 2.7 | 2.6 | 2.5 | 2.4 | 2.2 | 2.1 | 2.0 | 1.9 | 1.9 | 1.8 |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE | .0 | .1 | .4 | 1.9 | 6.6 | 14.2 | 21.3 | 23.2 | 30.7 | 25.2 |
| DIESEL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL | 10.3 | 15.1 | 19.0 | 21.3 | 23.1 | 18.6 | 15.5 | 11.7 | 12.3 | 16.8 |
| -OIL | NA | NA | NA | NA | NA | .8 | .7 | .6 | 1.8 | 3.3 |
| COKE PLANTS | .0 | .1 | .1 | .1 | .1 | .1 | .1 | .1 | .1 | .2 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS FUEL OIL | NA | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .0 |
| CEMENT PLANTS | .0 | .0 | .0 | .0 | NA | NA | NA | NA | NA | NA |
| WILD FIRES | 7.3 | 7.3 | 7.3 | 7.3 | 7.3 | 7.3 | 6.1 | .7 | 3.1 | .5 |
| MISCELLANEOUS | 9.4 | 10.3 | 11.2 | 11.3 | 11.3 | 12.8 | 13.9 | 12.8 | 11.5 | 16.7 |

TABLE 6. NOX EMISSIONS (1000 TONS) 1950-1980 MINNESOTA

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | |
| ELECTRIC UTILITIES | 10.3 | 12.7 | 17.0 | 27.0 | 43.3 | 61.5 | 78.4 | 84.7 |
| INDUSTRIAL BOILERS | 3.8 | 3.6 | 10.7 | 7.8 | 6.7 | 5.8 | 7.4 | 5.2 |
| COMMERCIAL-RESIDENTIAL | 1.5 | 1.0 | 3.2 | 2.1 | 2.3 | .5 | .2 | .5 |
| ANTHRACITE COAL | | | | | | | | |
| ALL USES | .4 | 1.1 | .1 | .3 | .2 | .1 | .0 | .0 |
| RESIDUAL OIL | | | | | | | | |
| ELECTRIC UTILITIES | .2 | .1 | .1 | .4 | 1.0 | .9 | 1.4 | .3 |
| INDUSTRIAL | 1.4 | 1.1 | 5.6 | 3.7 | 3.7 | 3.3 | 1.7 | 2.1 |
| COMMERCIAL | .0 | .0 | .7 | .7 | .6 | .4 | .8 | .0 |
| DISTILLATE OIL | | | | | | | | |
| ELECTRIC UTILITIES | .9 | .7 | .5 | .3 | 1.0 | 1.5 | 1.2 | 1.0 |
| INDUSTRIAL | .2 | .9 | .6 | .7 | .6 | .5 | .7 | .9 |
| COMMERCIAL-RESIDENTIAL | .7 | 1.1 | 5.2 | 6.0 | 6.5 | 6.2 | 7.1 | 3.0 |
| NATURAL GAS | | | | | | | | |
| ELECTRIC UTILITIES | 4.4 | 7.7 | 11.9 | 10.9 | 14.4 | 15.3 | .4 | 2.0 |
| INDUSTRIAL | 13.8 | 23.2 | 16.2 | 27.5 | 6.9 | 7.0 | 8.4 | 7.1 |
| PIPELINES | .4 | .2 | .4 | 1.5 | 9.3 | 4.8 | 4.6 | 11.4 |
| COMMERCIAL-RESIDENTIAL | 1.6 | 2.9 | 4.1 | 5.7 | 8.9 | 10.2 | 9.4 | 8.4 |
| WOOD | | | | | | | | |
| ELECTRIC UTILITIES | .2 | .1 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | .4 | .5 | .5 | .7 | .8 | 1.1 | 1.5 | 1.5 |
| COMMERCIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDENTIAL | 2.3 | 1.8 | 1.4 | 1.1 | .9 | .9 | 1.4 | 2.0 |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE | 46.4 | 58.3 | 70.8 | 81.9 | 106.7 | 118.7 | 120.4 | 108.1 |
| DIESEL | 2.0 | 2.8 | 3.6 | 7.5 | 19.0 | 25.9 | 36.8 | 36.5 |
| OTHER | | | | | | | | |
| RAILROADS-COAL | 9.1 | 3.0 | .6 | .3 | .1 | .0 | .0 | .0 |
| -OIL | 9.3 | 10.8 | 19.8 | 15.6 | 15.9 | 16.4 | 11.5 | 14.3 |
| COKE PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS-DISTILLATE | .0 | .0 | .1 | .1 | .2 | .3 | .3 | .5 |
| -RESIDUAL | .1 | .0 | .0 | .0 | .0 | .7 | .6 | 1.2 |
| OFF HIGHWAY DIESEL | 1.5 | 3.4 | 7.8 | 10.9 | 8.4 | 8.5 | 8.5 | 5.8 |
| CEMENT PLANT | .2 | .3 | .3 | .3 | .0 | .0 | .0 | .0 |
| WILD FIRES | .2 | 1.7 | 3.5 | 1.0 | .6 | 1.2 | .4 | 3.2 |
| MISCELLANEOUS | 23.2 | 20.0 | 17.1 | 20.3 | 22.3 | 12.5 | 10.5 | 8.9 |

TABLE 5. NOX EMISSIONS (1000 TONS) 1900-1945 MISSISSIPPI

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | | | |
| ELECTRIC UTILITIES | .9 | 1.5 | 2.1 | 2.7 | 2.7 | 1.7 | 1.7 | 2.2 | 4.9 | 9.2 |
| INDUSTRIAL BOILERS | 2.4 | 3.5 | 4.6 | 5.8 | 5.5 | 4.6 | 3.8 | 3.5 | 4.3 | 5.4 |
| COMMERCIAL-RESIDENTIAL | .3 | .5 | .6 | .9 | .9 | 1.1 | 1.2 | .9 | 1.0 | 1.3 |
| ANTHRACITE COAL | | | | | | | | | | |
| ALL USES | .0 | .0 | .0 | .0 | .0 | .0 | NA | NA | NA | NA |
| RESIDUAL OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .1 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | NA | NA | NA | NA | NA | .1 | .1 | .1 | .0 | .1 |
| COMMERCIAL | NA | NA | NA | NA | NA | .1 | .1 | .2 | .0 | .1 |
| DISTILLATE OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .1 | .0 | .0 | .0 | .1 |
| INDUSTRIAL | NA | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .0 |
| COMMERCIAL-RESIDENTIAL | NA | NA | NA | NA | NA | .0 | .0 | .1 | .1 | .2 |
| NATURAL GAS | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | .0 | .0 | .1 | .2 | .2 | .8 |
| INDUSTRIAL | NA | NA | .0 | .0 | .0 | .0 | .5 | 3.5 | 4.9 | 11.7 |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | .0 | .0 | .0 | .0 | .0 | .2 | .3 | .5 |
| WOOD | | | | | | | | | | |
| ALL USES | 4.3 | 4.1 | 3.9 | 3.8 | 3.6 | 3.4 | 3.2 | 3.1 | 3.0 | 2.8 |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE | .0 | .0 | .1 | .6 | 2.2 | 4.7 | 7.8 | 7.7 | 12.4 | 13.2 |
| DIESEL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL | 5.6 | 8.4 | 11.0 | 12.7 | 14.7 | 12.9 | 11.7 | 9.6 | 11.1 | 16.8 |
| -OIL | NA | NA | NA | NA | NA | .7 | .6 | .5 | 1.2 | 1.4 |
| COKE PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .1 | .2 | .3 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS FUEL OIL | NA | NA | NA | NA | NA | .0 | .0 | .0 | .1 | .4 |
| CEMENT PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| WILD FIRES | 24.2 | 24.2 | 24.2 | 24.2 | 24.2 | 24.2 | 28.5 | 75.1 | 86.1 | 45.0 |
| MISCELLANEOUS | 10.2 | 11.0 | 11.9 | 12.2 | 12.3 | 13.2 | 13.9 | 13.5 | 13.1 | 17.9 |

TABLE 6. NOX EMISSIONS (1000 TONS) 1950-1980 MISSISSIPPI

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .1 | .1 | 5.6 | 18.1 | 19.9 | 41.0 |
| INDUSTRIAL BOILERS | .0 | .0 | .0 | .0 | .0 | .2 | .7 | .5 |
| COMMERCIAL-RESIDENTIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| ANTHRACITE COAL | | | | | | | | |
| ALL USES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDUAL OIL | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .1 | .1 | .0 | .7 | 8.2 | 21.9 | 4.9 |
| INDUSTRIAL | .1 | .1 | .3 | .2 | .3 | 2.1 | 2.8 | 2.5 |
| COMMERCIAL | .0 | .0 | .0 | .0 | .0 | .2 | .3 | 1.9 |
| DISTILLATE OIL | | | | | | | | |
| ELECTRIC UTILITIES | .2 | .0 | .0 | .0 | .0 | 4.9 | 2.6 | .5 |
| INDUSTRIAL | .1 | .1 | .3 | .2 | .5 | .5 | 1.2 | .6 |
| COMMERCIAL-RESIDENTIAL | .4 | .5 | .0 | .1 | .4 | 1.3 | 2.0 | .0 |
| NATURAL GAS | | | | | | | | |
| ELECTRIC UTILITIES | 3.8 | 8.2 | 8.4 | 13.3 | 23.8 | 7.7 | 10.6 | 23.3 |
| INDUSTRIAL | 19.6 | 32.9 | 28.8 | 37.7 | 9.5 | 6.9 | 5.0 | 5.2 |
| PIPELINES | 11.8 | 21.2 | 39.2 | 56.6 | 84.0 | 57.8 | 46.3 | 54.6 |
| COMMERCIAL-RESIDENTIAL | .8 | 1.4 | 2.0 | 1.8 | 3.0 | 2.7 | 2.6 | 2.5 |
| WOOD | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | 1.0 | 1.2 | 1.3 | 1.3 | 1.6 | 1.5 | 1.9 | 1.8 |
| COMMERCIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDENTIAL | 3.6 | 2.8 | 2.2 | 1.5 | .8 | .8 | .9 | .9 |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE | 27.9 | 35.5 | 41.3 | 51.1 | 56.0 | 67.7 | 71.1 | 63.4 |
| DIESEL | 1.8 | 1.9 | 1.8 | 3.2 | 15.3 | 18.2 | 25.4 | 29.7 |
| OTHER | | | | | | | | |
| RAILROADS-COAL | 9.2 | 2.9 | .6 | .0 | .0 | .0 | .0 | .0 |
| -OIL | 2.5 | 3.8 | 4.1 | 2.0 | 3.5 | 1.9 | 2.9 | 7.1 |
| COKE PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS-DISTILLATE | .2 | .2 | .0 | .7 | .7 | 2.4 | 3.6 | .4 |
| -RESIDUAL | .2 | .0 | .0 | .3 | .0 | 1.5 | 2.8 | 6.7 |
| OFF HIGHWAY DIESEL | 3.0 | 3.5 | 8.3 | 8.3 | 14.0 | 9.8 | 19.7 | 6.3 |
| CEMENT PLANT | NA | .4 | .6 | .7 | .4 | .4 | .4 | .5 |
| WILD FIRES | 28.0 | 13.7 | 3.1 | 1.3 | 2.0 | 1.0 | 2.3 | 1.9 |
| MISCELLANEOUS | 22.9 | 22.6 | 22.5 | 24.6 | 26.8 | 21.5 | 21.8 | 20.0 |

TABLE 5. NOX EMISSIONS (1000 TONS) 1900-1945 MISSOURI

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | | | |
| ELECTRIC UTILITIES | 3.3 | 5.4 | 7.4 | 9.9 | 11.7 | 13.2 | 12.1 | 8.2 | 12.2 | 16.5 |
| INDUSTRIAL BOILERS | 32.7 | 43.3 | 51.8 | 59.3 | 56.0 | 49.7 | 38.3 | 30.2 | 32.8 | 36.3 |
| COMMERCIAL-RESIDENTIAL | 4.1 | 5.7 | 7.2 | 9.2 | 9.5 | 10.8 | 11.4 | 8.9 | 8.9 | 11.9 |
| ANTHRACITE COAL | | | | | | | | | | |
| ALL USES | 2.0 | 2.7 | 2.9 | 3.1 | 3.1 | 2.3 | NA | NA | NA | NA |
| RESIDUAL OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .3 | .2 | .2 | .1 | .3 |
| INDUSTRIAL | NA | NA | NA | NA | NA | 1.2 | 1.2 | 1.2 | 1.1 | 2.0 |
| COMMERCIAL | NA | NA | NA | NA | NA | .1 | .1 | .2 | .1 | .2 |
| DISTILLATE OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .1 | .1 | .1 | .3 | .7 |
| INDUSTRIAL | NA | NA | NA | NA | NA | .1 | .1 | .1 | .1 | .2 |
| COMMERCIAL-RESIDENTIAL | NA | NA | NA | NA | NA | .1 | .1 | .2 | .3 | .3 |
| NATURAL GAS | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | .0 | .1 | .2 | 1.8 | 2.6 | 3.6 |
| INDUSTRIAL | NA | NA | .0 | 2.8 | .4 | .3 | 9.5 | 8.5 | 11.8 | 19.3 |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | .0 | .0 | .2 | .2 | .5 | .5 | .9 | 1.2 |
| WOOD | | | | | | | | | | |
| ALL USES | 3.5 | 3.3 | 3.2 | 3.0 | 2.9 | 2.8 | 2.6 | 2.5 | 2.4 | 2.3 |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE | .0 | .1 | .3 | 1.7 | 6.0 | 12.9 | 26.7 | 30.9 | 40.9 | 34.2 |
| DIESEL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL | 4.0 | 5.6 | 6.6 | 6.9 | 7.3 | 5.9 | 4.9 | 3.7 | 3.9 | 5.3 |
| -OIL | NA | NA | NA | NA | NA | 16.9 | 15.9 | 13.0 | 14.2 | 17.1 |
| COKE PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS FUEL OIL | NA | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .0 |
| CEMENT PLANTS | .0 | .9 | 1.1 | 1.1 | 1.5 | 2.0 | 1.9 | .8 | 1.2 | .8 |
| WILD FIRES | 12.6 | 12.6 | 12.6 | 12.6 | 12.6 | 12.6 | .0 | .1 | 3.3 | 13.5 |
| MISCELLANEOUS | 18.6 | 19.4 | 20.2 | 20.5 | 20.7 | 22.0 | 23.0 | 22.4 | 21.6 | 29.3 |

TABLE 6. NOX EMISSIONS (1000 TONS) 1950-1980 MISSOURI

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | |
| ELECTRIC UTILITIES | 12.5 | 26.5 | 42.3 | 65.4 | 132.2 | 205.4 | 236.0 | 255.7 |
| INDUSTRIAL BOILERS | 17.4 | 16.3 | 21.0 | 18.4 | 14.2 | 14.3 | 14.7 | 13.4 |
| COMMERCIAL-RESIDENTIAL | 5.4 | 3.4 | 5.9 | 1.5 | .5 | .5 | .3 | .4 |
| ANTHRACITE COAL | | | | | | | | |
| ALL USES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDUAL OIL | | | | | | | | |
| ELECTRIC UTILITIES | .3 | .2 | .1 | .0 | .2 | .9 | 1.0 | .0 |
| INDUSTRIAL | 2.4 | 3.2 | 1.4 | 1.4 | 1.7 | 1.1 | 1.2 | .8 |
| COMMERCIAL | .0 | .0 | .9 | 1.0 | 1.1 | .7 | .9 | .4 |
| DISTILLATE OIL | | | | | | | | |
| ELECTRIC UTILITIES | .8 | .7 | .4 | .3 | .3 | .7 | 3.3 | .8 |
| INDUSTRIAL | .5 | .4 | .4 | .4 | .5 | .7 | .9 | .5 |
| COMMERCIAL-RESIDENTIAL | .9 | 1.0 | 3.2 | 2.4 | 2.6 | 2.6 | 3.0 | 1.0 |
| NATURAL GAS | | | | | | | | |
| ELECTRIC UTILITIES | 5.2 | 5.6 | 74.1 | 9.9 | 15.5 | 6.4 | 6.7 | 3.8 |
| INDUSTRIAL | 28.1 | 33.4 | 27.6 | 37.0 | 7.7 | 6.3 | 4.8 | 5.5 |
| PIPELINES | 6.2 | 9.1 | 10.0 | 11.2 | 3.3 | 9.4 | 5.5 | 7.0 |
| COMMERCIAL-RESIDENTIAL | 3.1 | 4.8 | 7.2 | 8.5 | 12.2 | 12.3 | 12.9 | 11.0 |
| WOOD | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | .4 | .5 | .5 | .6 | .7 | .9 | 1.2 | 1.1 |
| COMMERCIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDENTIAL | 3.4 | 2.6 | 2.1 | 1.5 | 1.1 | 1.1 | 1.8 | 2.4 |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE | 66.4 | 81.3 | 91.5 | 106.7 | 122.3 | 142.5 | 144.3 | 129.0 |
| DIESEL | 2.6 | 3.3 | 6.7 | 13.2 | 30.3 | 35.6 | 50.1 | 51.8 |
| OTHER | | | | | | | | |
| RAILROADS-COAL | 2.9 | .9 | .2 | .1 | .0 | .0 | .0 | .0 |
| -OIL | 16.9 | 29.6 | 24.7 | 26.7 | 20.3 | 16.4 | 19.7 | 13.5 |
| COKE PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS-DISTILLATE | .1 | .4 | .4 | 1.3 | 1.9 | .8 | .4 | 1.1 |
| -RESIDUAL | .2 | .2 | .0 | .0 | .0 | .0 | .0 | .0 |
| OFF HIGHWAY DIESEL | .8 | 2.3 | 8.3 | 9.8 | 6.0 | 5.8 | 9.9 | 7.4 |
| CEMENT PLANT | 1.8 | 2.3 | 2.6 | 3.4 | 5.1 | 5.1 | 6.0 | 4.7 |
| WILD FIRES | 12.8 | 6.1 | 7.8 | 8.8 | 1.0 | 1.8 | .8 | 2.0 |
| MISCELLANEOUS | 37.4 | 35.6 | 34.3 | 38.8 | 42.5 | 31.1 | 30.4 | 27.5 |

TABLE 5. NOX EMISSIONS (1000 TONS) 1900-1945 MONTANA

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | | | |
| ELECTRIC UTILITIES | .3 | .6 | .8 | 1.0 | 1.0 | .6 | .4 | .2 | .3 | .3 |
| INDUSTRIAL BOILERS | 3.8 | 5.3 | 6.7 | 8.2 | 8.3 | 8.1 | 6.2 | 4.4 | 4.3 | 4.1 |
| COMMERCIAL-RESIDENTIAL | 1.0 | 1.5 | 2.0 | 2.6 | 2.8 | 3.2 | 3.3 | 2.4 | 2.3 | 2.9 |
| ANTHRACITE COAL | | | | | | | | | | |
| ALL USES | .0 | .0 | .0 | .0 | .0 | .0 | NA | NA | NA | NA |
| RESIDUAL OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDUSTRIAL | NA | NA | NA | NA | NA | .3 | .2 | .2 | .3 | .3 |
| COMMERCIAL | NA | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .4 |
| DISTILLATE OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | NA | NA | NA | NA | NA | NA | NA | NA | .0 | .0 |
| COMMERCIAL-RESIDENTIAL | NA | NA | NA | NA | NA | .0 | .0 | .0 | .1 | .3 |
| NATURAL GAS | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | .0 | .1 | .1 | .2 | .2 | .3 |
| INDUSTRIAL | NA | NA | .0 | .0 | .4 | .8 | 2.6 | 4.0 | 5.5 | 6.5 |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | .0 | .0 | .0 | .1 | .2 | .3 | .5 | .7 |
| WOOD | | | | | | | | | | |
| ALL USES | .7 | .7 | .7 | .6 | .6 | .6 | .5 | .5 | .5 | .5 |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE | .0 | .0 | .0 | .2 | .7 | 1.6 | 3.5 | 4.6 | 6.3 | 5.0 |
| DIESEL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL | 5.2 | 7.6 | 9.4 | 10.5 | 11.4 | 9.2 | 7.6 | 5.8 | 6.1 | 8.3 |
| -OIL | NA | NA | NA | NA | NA | 13.4 | 12.6 | 10.3 | 11.7 | 44.6 |
| COKE PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS FUEL OIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CEMENT PLANTS | .0 | .0 | NA | NA | NA | NA | NA | NA | NA | NA |
| WILD FIRES | 8.2 | 8.2 | 8.2 | 8.2 | 8.2 | 8.2 | 1.9 | 4.4 | 9.7 | 5.7 |
| MISCELLANEOUS | 1.6 | 2.0 | 2.4 | 2.4 | 2.5 | 3.0 | 3.4 | 3.0 | 2.6 | 3.9 |

TABLE 6. NOX EMISSIONS (1000 TONS) 1950-1980 MONTANA

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | 2.2 | 3.4 | 7.5 | 13.8 | 38.3 | 39.8 |
| INDUSTRIAL BOILERS | .1 | .1 | .1 | .8 | .2 | .4 | 1.7 | 1.7 |
| COMMERCIAL-RESIDENTIAL | 1.0 | .7 | 1.1 | .8 | .1 | .0 | .0 | .1 |
| ANTHRACITE COAL | | | | | | | | |
| ALL USES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDUAL OIL | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | .5 | .7 | 1.5 | .4 | 1.0 | 1.8 | 1.9 | 4.5 |
| COMMERCIAL | .0 | .0 | .2 | .3 | .1 | .3 | .5 | .0 |
| DISTILLATE OIL | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .1 | .2 | .2 |
| INDUSTRIAL | .0 | .0 | .1 | .2 | .1 | .9 | 1.1 | .3 |
| COMMERCIAL-RESIDENTIAL | .3 | .4 | .6 | .5 | .5 | .6 | .9 | .3 |
| NATURAL GAS | | | | | | | | |
| ELECTRIC UTILITIES | .2 | .2 | .1 | .4 | .6 | .3 | .2 | 1.0 |
| INDUSTRIAL | 6.7 | 7.7 | 8.0 | 10.3 | 2.5 | 2.2 | 1.9 | 1.2 |
| PIPELINES | .8 | .6 | .6 | .5 | 7.2 | 5.1 | 5.4 | 7.8 |
| COMMERCIAL-RESIDENTIAL | 1.0 | 1.2 | 1.4 | 1.7 | 2.2 | 2.1 | 2.0 | 1.7 |
| WOOD | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .1 | .0 | .1 | .0 |
| INDUSTRIAL | .1 | .2 | .2 | .3 | .2 | .2 | .4 | .4 |
| COMMERCIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDENTIAL | .6 | .5 | .4 | .3 | .2 | .2 | .4 | .5 |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE | 11.8 | 14.8 | 16.9 | 20.0 | 22.4 | 26.0 | 28.9 | 24.5 |
| DIESEL | 1.7 | 2.1 | 3.3 | 6.6 | 8.7 | 10.5 | 14.6 | 14.2 |
| OTHER | | | | | | | | |
| RAILROADS-COAL | 4.5 | 1.5 | .3 | .1 | .1 | .0 | .0 | .0 |
| -OIL | 35.7 | 22.8 | 19.7 | 15.1 | 13.2 | 15.8 | 15.2 | 18.6 |
| COKE PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS-DISTILLATE | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -RESIDUAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| OFF HIGHWAY DIESEL | 2.9 | 2.8 | 6.2 | 7.7 | 4.9 | 4.8 | 3.3 | 3.5 |
| CEMENT PLANT | .3 | .4 | .4 | .5 | .7 | .8 | .9 | .8 |
| WILD FIRES | .1 | .7 | 4.5 | .3 | 3.0 | .6 | .5 | 5.1 |
| MISCELLANEOUS | 5.5 | 5.2 | 5.0 | 5.7 | 6.2 | 4.3 | 4.2 | 3.7 |

TABLE 5. NOX EMISSIONS (1000 TONS) 1900-1945 NEBRASKA

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | | | |
| ELECTRIC UTILITIES | 1.6 | 2.7 | 3.7 | 4.9 | 5.6 | 5.8 | 4.8 | 3.0 | 3.8 | 4.3 |
| INDUSTRIAL BOILERS | 8.0 | 10.1 | 11.4 | 12.2 | 10.6 | 8.2 | 5.6 | 4.0 | 4.0 | 3.9 |
| COMMERCIAL-RESIDENTIAL | 2.4 | 3.2 | 3.8 | 4.5 | 4.5 | 5.1 | 5.1 | 3.5 | 2.9 | 3.1 |
| ANTHRACITE COAL | | | | | | | | | | |
| ALL USES | 2.8 | 3.8 | 4.1 | 4.4 | 4.4 | 3.3 | NA | NA | NA | NA |
| RESIDUAL OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .1 | .1 | .1 | .1 | .2 |
| INDUSTRIAL | NA | NA | NA | NA | NA | .1 | .1 | .1 | .0 | .1 |
| COMMERCIAL | NA | NA | NA | NA | NA | .0 | .0 | .1 | .0 | .0 |
| DISTILLATE OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .3 | .3 | .2 | .3 | .1 |
| INDUSTRIAL | NA | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .0 |
| COMMERCIAL-RESIDENTIAL | NA | NA | NA | NA | NA | .0 | .0 | .1 | .1 | .3 |
| NATURAL GAS | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | .0 | .0 | .1 | 1.0 | 1.4 | .7 |
| INDUSTRIAL | NA | NA | .0 | NA | .0 | .0 | .5 | 2.4 | 3.4 | 7.1 |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | .0 | .0 | .0 | .0 | .0 | .2 | .4 | .5 |
| WOOD | | | | | | | | | | |
| ALL USES | .3 | .3 | .3 | .2 | .2 | .2 | .2 | .2 | .2 | .2 |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE | .0 | .0 | .2 | 1.0 | 3.6 | 7.7 | 12.6 | 12.2 | 13.1 | 11.8 |
| DIESEL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL | 7.5 | 9.9 | 11.0 | 10.8 | 11.1 | 8.9 | 7.4 | 5.6 | 5.9 | 8.1 |
| -OIL | NA | NA | NA | NA | NA | 1.8 | 1.7 | 1.4 | 1.8 | 4.9 |
| COKE PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS FUEL OIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CEMENT PLANTS | .0 | .0 | .0 | NA | NA | NA | NA | NA | NA | NA |
| WILD FIRES | .0 | .0 | .0 | .0 | .0 | .0 | NA | NA | NA | .0 |
| MISCELLANEOUS | 5.9 | 6.2 | 6.6 | 6.7 | 6.7 | 7.3 | 7.8 | 7.3 | 6.9 | 9.0 |

TABLE 6. NOX EMISSIONS (1000 TONS) 1950-1980 NEBRASKA

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | |
| ELECTRIC UTILITIES | 1.5 | 1.4 | 2.9 | 5.6 | 5.8 | 16.9 | 33.4 | 54.3 |
| INDUSTRIAL BOILERS | 1.8 | 1.7 | 2.0 | 3.5 | 2.1 | 2.5 | 5.3 | 2.8 |
| COMMERCIAL-RESIDENTIAL | .5 | .3 | .5 | .2 | .3 | .0 | .0 | .1 |
| ANTHRACITE COAL | | | | | | | | |
| ALL USES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDUAL OIL | | | | | | | | |
| ELECTRIC UTILITIES | .1 | .0 | .1 | .1 | .2 | .8 | 1.2 | .0 |
| INDUSTRIAL | .1 | .1 | .0 | .1 | .2 | .1 | .1 | .0 |
| COMMERCIAL | .0 | .0 | .0 | .0 | .1 | .1 | .1 | .0 |
| DISTILLATE OIL | | | | | | | | |
| ELECTRIC UTILITIES | .5 | .2 | .2 | .2 | .2 | .6 | .2 | .3 |
| INDUSTRIAL | .1 | .1 | .0 | .1 | .3 | .2 | .3 | .1 |
| COMMERCIAL-RESIDENTIAL | .4 | .6 | .9 | .8 | 1.1 | 1.1 | 1.4 | .2 |
| NATURAL GAS | | | | | | | | |
| ELECTRIC UTILITIES | 3.0 | 5.2 | 7.6 | 8.0 | 11.7 | 9.2 | 3.1 | 2.9 |
| INDUSTRIAL | 11.3 | 18.0 | 13.0 | 16.4 | 3.8 | 5.1 | 3.6 | 3.4 |
| PIPELINES | 4.8 | 5.3 | 7.9 | 10.8 | 18.5 | 14.3 | 12.6 | 13.5 |
| COMMERCIAL-RESIDENTIAL | 1.4 | 2.3 | 3.1 | 3.7 | 5.3 | 4.8 | 4.4 | 4.6 |
| WOOD | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | .0 | .0 | .0 | .0 | .0 | .1 | .2 | .2 |
| COMMERCIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDENTIAL | .3 | .2 | .2 | .1 | .1 | .1 | .1 | .1 |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE | 26.5 | 32.2 | 34.7 | 39.4 | 46.2 | 52.5 | 52.5 | 43.1 |
| DIESEL | 1.2 | 2.2 | 1.7 | 3.6 | 10.3 | 15.7 | 19.6 | 21.1 |
| OTHER | | | | | | | | |
| RAILROADS-COAL | 4.4 | 1.4 | .3 | .1 | .1 | .0 | .0 | .0 |
| -OIL | 6.2 | 9.8 | 10.6 | 6.0 | 18.2 | 15.9 | 28.9 | 12.7 |
| COKE PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS-DISTILLATE | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -RESIDUAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| OFF HIGHWAY DIESEL | 1.5 | 2.2 | 5.3 | 4.8 | 8.2 | 6.6 | 8.7 | 2.2 |
| CEMENT PLANT | .5 | .7 | .8 | .9 | 1.1 | 1.2 | 1.0 | .8 |
| WILD FIRES | .1 | .0 | 1.3 | 10.1 | 2.2 | 3.2 | 1.4 | 3.1 |
| MISCELLANEOUS | 11.0 | 10.5 | 10.0 | 10.2 | 10.5 | 7.2 | 6.8 | 6.2 |

TABLE 5. NOX EMISSIONS (1000 TONS) 1900-1945 NEVADA

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL BOILERS | .7 | 1.0 | 1.4 | 1.9 | 2.2 | 2.6 | 2.0 | 1.4 | 1.3 | 1.1 |
| COMMERCIAL-RESIDENTIAL | .1 | .1 | .2 | .3 | .3 | .4 | .4 | .2 | .2 | .2 |
| ANTHRACITE COAL | | | | | | | | | | |
| ALL USES | .0 | .0 | .0 | .0 | .0 | .0 | NA | NA | NA | NA |
| RESIDUAL OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | NA | NA | NA | NA | NA | .1 | .1 | .1 | .1 | .4 |
| COMMERCIAL | NA | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .0 |
| DISTILLATE OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | NA | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .0 |
| COMMERCIAL-RESIDENTIAL | NA | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .1 |
| NATURAL GAS | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| WOOD | | | | | | | | | | |
| ALL USES | .1 | .1 | .1 | .1 | .1 | .1 | .1 | .1 | .1 | .1 |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE | .0 | .0 | .0 | .1 | .2 | .5 | 1.0 | 1.4 | 2.2 | 2.1 |
| DIESEL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL | 1.3 | 2.1 | 2.9 | 3.5 | 4.0 | 3.2 | 2.7 | 2.0 | 2.1 | 2.9 |
| -OIL | NA | NA | NA | NA | NA | 35.0 | 32.9 | 27.0 | 22.8 | 47.9 |
| COKE PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS FUEL OIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CEMENT PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| WILD FIRES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .2 | .3 |
| MISCELLANEOUS | .2 | .3 | .4 | .4 | .4 | .4 | .5 | .4 | .4 | .7 |

TABLE 6. NOX EMISSIONS (1000 TONS) 1950-1980 NEVADA

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | 2.1 | 6.4 | 51.1 | 43.3 | 51.7 |
| INDUSTRIAL BOILERS | .5 | .5 | .4 | .7 | .2 | .6 | .8 | 1.3 |
| COMMERCIAL-RESIDENTIAL | .0 | .0 | .0 | .1 | .4 | .0 | .0 | .0 |
| ANTHRACITE COAL | | | | | | | | |
| ALL USES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDUAL OIL | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .1 | 1.6 | 3.2 | 3.0 |
| INDUSTRIAL | .2 | .1 | .0 | .0 | .0 | .0 | .0 | .0 |
| COMMERCIAL | .0 | .0 | .1 | .0 | .0 | .0 | .0 | .0 |
| DISTILLATE OIL | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .1 | .0 | .0 | .2 | .0 | .1 |
| INDUSTRIAL | .0 | .1 | .1 | .2 | .2 | .2 | .4 | .2 |
| COMMERCIAL-RESIDENTIAL | .1 | .1 | .2 | .3 | .3 | .2 | .3 | .2 |
| NATURAL GAS | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .7 | 1.6 | 3.3 | 6.2 | 6.2 | 5.3 | 6.7 |
| INDUSTRIAL | .0 | 4.2 | 1.1 | 2.4 | .7 | .7 | .8 | .5 |
| PIPELINES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .2 |
| COMMERCIAL-RESIDENTIAL | .0 | .1 | .1 | .3 | .8 | 1.3 | 6.0 | 1.2 |
| WOOD | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| COMMERCIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDENTIAL | .1 | .1 | .1 | .1 | .1 | .1 | .1 | .2 |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE | 4.4 | 7.2 | 9.0 | 14.0 | 15.6 | 19.8 | 23.0 | 22.3 |
| DIESEL | 1.2 | .7 | 1.7 | 2.2 | 5.2 | 6.6 | 9.2 | 11.3 |
| OTHER | | | | | | | | |
| RAILROADS-COAL | 1.6 | .5 | .1 | .1 | .0 | .0 | .0 | .0 |
| -OIL | 27.6 | 15.4 | 9.3 | 9.4 | 5.4 | 2.0 | 4.8 | 7.0 |
| COKE PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS-DISTILLATE | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -RESIDUAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| OFF HIGHWAY DIESEL | 1.1 | .8 | 1.6 | 2.3 | 2.3 | 1.5 | 3.1 | 1.5 |
| CEMENT PLANT | .0 | .0 | .0 | .0 | .4 | .5 | .6 | .6 |
| WILD FIRES | .4 | .1 | .1 | .2 | .1 | .5 | .2 | 1.3 |
| MISCELLANEOUS | 1.2 | .8 | .5 | 1.7 | 2.4 | .9 | .4 | .2 |

TABLE 5. NOX EMISSIONS (1000 TONS) 1900-1945 NEW HAMPSHIRE

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | | | |
| ELECTRIC UTILITIES | .6 | .9 | 1.3 | 1.7 | 1.9 | 2.0 | 1.7 | 1.1 | 1.5 | 1.8 |
| INDUSTRIAL BOILERS | 3.3 | 4.3 | 5.2 | 6.0 | 5.9 | 5.6 | 4.5 | 3.5 | 3.7 | 4.1 |
| COMMERCIAL-RESIDENTIAL | .1 | .2 | .2 | .3 | .3 | .4 | .4 | .3 | .4 | .5 |
| ANTHRACITE COAL | | | | | | | | | | |
| ALL USES | 10.6 | 14.4 | 15.5 | 16.2 | 16.4 | 12.2 | 4.3 | 3.2 | 5.3 | 5.7 |
| RESIDUAL OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .2 | .2 | .2 | .3 | .1 |
| INDUSTRIAL | NA | NA | NA | NA | NA | .3 | .3 | .3 | .4 | .3 |
| COMMERCIAL | NA | NA | NA | NA | NA | NA | NA | NA | .0 | .0 |
| DISTILLATE OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .1 | .1 | .1 | .1 | .1 |
| INDUSTRIAL | NA | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .0 |
| COMMERCIAL-RESIDENTIAL | NA | NA | NA | NA | NA | .1 | .2 | .3 | .4 | .3 |
| NATURAL GAS | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| WOOD | | | | | | | | | | |
| ALL USES | .8 | .8 | .8 | .7 | .7 | .7 | .6 | .6 | .6 | .5 |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE | .0 | .0 | .1 | .3 | 1.0 | 2.2 | 3.9 | 4.5 | 5.6 | 4.3 |
| DIESEL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL | 1.9 | 2.6 | 3.1 | 3.2 | 3.5 | 2.9 | 2.5 | 2.0 | 2.2 | 3.3 |
| -OIL | NA | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .0 |
| COKE PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS FUEL OIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CEMENT PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| WILD FIRES | .1 | .1 | .1 | .1 | .1 | .1 | .4 | .1 | .0 | .0 |
| MISCELLANEOUS | 2.1 | 2.2 | 2.2 | 2.2 | 2.3 | 2.4 | 2.4 | 2.4 | 2.3 | 3.1 |

TABLE 6. NOX EMISSIONS (1000 TONS) 1950-1980 NEW HAMPSHIRE

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | |
| ELECTRIC UTILITIES | .3 | .3 | 1.1 | 4.1 | 11.6 | 12.1 | 9.1 | 13.0 |
| INDUSTRIAL BOILERS | .0 | .6 | 1.0 | 1.1 | 2.1 | .0 | .0 | .1 |
| COMMERCIAL-RESIDENTIAL | .1 | .0 | .1 | .1 | .0 | .0 | .0 | .0 |
| ANTHRACITE COAL | | | | | | | | |
| ALL USES | 2.3 | 1.2 | .8 | .3 | .1 | .0 | .0 | .0 |
| RESIDUAL OIL | | | | | | | | |
| ELECTRIC UTILITIES | 1.0 | 1.7 | 1.9 | 1.6 | 3.0 | 2.9 | 3.7 | 4.9 |
| INDUSTRIAL | .8 | .8 | .6 | .8 | 2.1 | 1.6 | 1.4 | 1.1 |
| COMMERCIAL | .1 | .0 | .1 | .2 | .6 | .6 | .6 | .2 |
| DISTILLATE OIL | | | | | | | | |
| ELECTRIC UTILITIES | .2 | .0 | .0 | .0 | .3 | .1 | .1 | .0 |
| INDUSTRIAL | .0 | .0 | .0 | .1 | .1 | .1 | .2 | .3 |
| COMMERCIAL-RESIDENTIAL | .6 | .6 | 2.0 | 2.5 | 3.1 | 2.8 | 3.1 | 2.0 |
| NATURAL GAS | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | .0 | .0 | .2 | .3 | .1 | .1 | .1 | .1 |
| PIPELINES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| COMMERCIAL-RESIDENTIAL | .0 | .1 | .1 | .2 | .2 | .2 | .2 | .4 |
| WOOD | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | .4 | .5 | .5 | .6 | .7 | .7 | 1.0 | 1.0 |
| COMMERCIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDENTIAL | .5 | .4 | .3 | .3 | .2 | .3 | .5 | .6 |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE | 8.7 | 10.9 | 12.5 | 15.3 | 21.3 | 24.9 | 27.8 | 24.7 |
| DIESEL | .1 | .2 | .5 | .9 | 1.5 | 2.4 | 3.5 | 4.0 |
| OTHER | | | | | | | | |
| RAILROADS-COAL | 1.4 | .3 | .0 | .0 | .0 | .0 | .0 | .0 |
| -OIL | .8 | 1.0 | .6 | .1 | .1 | .0 | .0 | .1 |
| COKE PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS-DISTILLATE | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -RESIDUAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| OFF HIGHWAY DIESEL | .2 | .4 | .2 | .4 | 1.0 | .5 | .2 | .8 |
| CEMENT PLANT | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| WILD FIRES | .1 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| MISCELLANEOUS | 4.0 | 3.4 | 2.8 | 3.5 | 3.9 | 2.0 | 1.6 | 1.4 |

TABLE 5. NOX EMISSIONS (1000 TONS) 1900-1945 NEW JERSEY

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | | | |
| ELECTRIC UTILITIES | 3.5 | 5.8 | 8.0 | 10.6 | 13.6 | 17.7 | 17.5 | 12.1 | 18.2 | 25.3 |
| INDUSTRIAL BOILERS | 13.7 | 20.8 | 28.5 | 37.2 | 41.1 | 44.2 | 36.8 | 28.6 | 30.6 | 33.3 |
| COMMERCIAL-RESIDENTIAL | .1 | .1 | .2 | .3 | .3 | .3 | .4 | .4 | .4 | .7 |
| ANTHRACITE COAL | | | | | | | | | | |
| ALL USES | 45.1 | 61.1 | 65.9 | 69.1 | 69.7 | 52.1 | 51.9 | 39.2 | 65.2 | 65.7 |
| RESIDUAL OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | 7.5 | 5.9 | 5.2 | 6.4 | 3.9 |
| INDUSTRIAL | NA | NA | NA | NA | NA | 15.5 | 14.8 | 14.6 | 14.5 | 12.6 |
| COMMERCIAL | NA | NA | NA | NA | NA | .1 | .2 | .3 | .6 | 3.6 |
| DISTILLATE OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .4 | .3 | .3 | .4 | .5 |
| INDUSTRIAL | NA | NA | NA | NA | NA | .5 | .5 | .5 | .6 | 1.6 |
| COMMERCIAL-RESIDENTIAL | NA | NA | NA | NA | NA | .4 | .7 | 1.1 | 1.4 | 3.8 |
| NATURAL GAS | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| WOOD | | | | | | | | | | |
| ALL USES | 1.6 | 1.5 | 1.4 | 1.4 | 1.3 | 1.2 | 1.2 | 1.1 | 1.1 | 1.0 |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE | .0 | .1 | .5 | 2.4 | 8.4 | 18.1 | 35.4 | 39.1 | 53.6 | 39.2 |
| DIESEL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL | 16.4 | 25.9 | 35.2 | 42.4 | 48.2 | 40.0 | 34.4 | 26.9 | 30.1 | 44.8 |
| -OIL | NA | NA | NA | NA | NA | .4 | .4 | .3 | 2.2 | 3.2 |
| COKE PLANTS | .0 | .0 | .1 | .1 | .1 | .2 | .2 | .1 | .2 | .2 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS FUEL OIL | NA | NA | NA | NA | NA | 125.7 | 149.2 | 118.2 | 110.0 | 227.1 |
| CEMENT PLANTS | .3 | .9 | 1.0 | .4 | NA | NA | NA | NA | NA | .0 |
| WILD FIRES | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 6.0 | 1.5 | .4 | .2 |
| MISCELLANEOUS | 11.1 | 12.9 | 14.8 | 14.9 | 15.1 | 19.5 | 23.0 | 19.6 | 15.6 | 25.5 |

TABLE 6. NOX EMISSIONS (1000 TONS) 1950-1980 NEW JERSEY

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | |
| ELECTRIC UTILITIES | 23.6 | 37.1 | 41.0 | 78.5 | 49.1 | 26.8 | 22.1 | 31.3 |
| INDUSTRIAL BOILERS | 16.2 | 15.1 | 10.7 | 15.0 | 3.2 | .4 | .4 | .3 |
| COMMERCIAL-RESIDENTIAL | .9 | .5 | .3 | .2 | .0 | .0 | .0 | .3 |
| ANTHRACITE COAL | | | | | | | | |
| ALL USES | 43.7 | 27.6 | 12.7 | 9.0 | 3.6 | .8 | .7 | .6 |
| RESIDUAL OIL | | | | | | | | |
| ELECTRIC UTILITIES | 18.2 | 8.5 | 14.1 | 15.2 | 45.4 | 27.5 | 32.0 | 14.9 |
| INDUSTRIAL | 22.9 | 27.2 | 24.6 | 18.1 | 22.6 | 13.8 | 16.7 | 19.6 |
| COMMERCIAL | .0 | .1 | .3 | 4.3 | 9.6 | 6.3 | 7.5 | 6.2 |
| DISTILLATE OIL | | | | | | | | |
| ELECTRIC UTILITIES | 1.1 | .0 | .1 | .1 | 2.3 | 6.4 | 4.5 | 3.4 |
| INDUSTRIAL | 3.4 | 3.5 | 1.2 | 1.5 | 1.4 | 1.7 | 1.4 | 4.0 |
| COMMERCIAL-RESIDENTIAL | 2.3 | 2.2 | 16.3 | 18.6 | 20.9 | 17.7 | 17.3 | 13.3 |
| NATURAL GAS | | | | | | | | |
| ELECTRIC UTILITIES | .0 | 3.4 | 6.2 | 5.7 | 11.2 | 2.1 | .2 | 19.5 |
| INDUSTRIAL | .2 | 9.4 | 12.8 | 19.7 | 5.6 | 3.7 | 3.0 | 4.4 |
| PIPELINES | .0 | .2 | .7 | .6 | 1.2 | .5 | .6 | .6 |
| COMMERCIAL-RESIDENTIAL | 38.0 | 2.4 | 4.3 | 6.7 | 9.8 | 9.1 | .9 | 9.8 |
| WOOD | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | .7 | .8 | .9 | 1.2 | 1.4 | 1.6 | 2.0 | 2.1 |
| COMMERCIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDENTIAL | .9 | .7 | .6 | .6 | .8 | .9 | 1.2 | 1.5 |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE | 66.3 | 90.7 | 103.4 | 123.9 | 186.0 | 220.4 | 210.8 | 186.3 |
| DIESEL | 4.0 | 5.1 | 9.9 | 19.5 | 32.4 | 38.0 | 40.9 | 49.6 |
| OTHER | | | | | | | | |
| RAILROADS-COAL | 19.3 | 3.9 | .5 | .0 | .0 | .0 | .0 | .0 |
| -OIL | 7.0 | 13.9 | 11.5 | 10.4 | 10.6 | 8.7 | 6.8 | 2.2 |
| COKE PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS-DISTILLATE | 2.4 | 2.6 | 2.7 | 1.9 | 3.3 | 3.2 | 4.2 | 3.5 |
| -RESIDUAL | 8.2 | 10.7 | 5.6 | 4.6 | 7.6 | 3.8 | 8.9 | 15.0 |
| OFF HIGHWAY DIESEL | 1.1 | 1.8 | 2.1 | 4.4 | 6.4 | 3.0 | 3.4 | 5.3 |
| CEMENT PLANT | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| WILD FIRES | .3 | .5 | .4 | .4 | .1 | .1 | .1 | .2 |
| MISCELLANEOUS | 39.7 | 34.7 | 30.3 | 39.6 | 45.7 | 25.0 | 20.7 | 16.9 |

TABLE 5. NOX EMISSIONS (1000 TONS) 1900-1945 NEW MEXICO

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | | | |
| ELECTRIC UTILITIES | .1 | .2 | .3 | .4 | .4 | .4 | .3 | .2 | .2 | .3 |
| INDUSTRIAL BOILERS | .6 | 1.0 | 1.5 | 2.1 | 2.7 | 3.5 | 2.9 | 2.0 | 1.8 | 1.7 |
| COMMERCIAL-RESIDENTIAL | .1 | .2 | .3 | .5 | .6 | .6 | .6 | .4 | .4 | .4 |
| ANTHRACITE COAL | | | | | | | | | | |
| ALL USES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDUAL OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .1 | .1 | .1 | .1 | .1 |
| INDUSTRIAL | NA | NA | NA | NA | NA | .1 | .1 | .1 | .1 | .1 |
| COMMERCIAL | NA | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .0 |
| DISTILLATE OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .1 |
| INDUSTRIAL | NA | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .0 |
| COMMERCIAL-RESIDENTIAL | NA | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .1 |
| NATURAL GAS | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | .0 | .0 | .1 | .7 | 1.1 | 1.6 |
| INDUSTRIAL | NA | NA | .0 | .0 | .0 | .0 | 1.9 | 11.0 | 15.4 | 26.3 |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | .0 | .0 | .0 | NA | .0 | .1 | .2 | .4 |
| WOOD | | | | | | | | | | |
| ALL USES | .7 | .7 | .7 | .6 | .6 | .6 | .5 | .5 | .5 | .5 |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE | .0 | .0 | .0 | .1 | .4 | .8 | 2.1 | 2.5 | 4.0 | 4.2 |
| DIESEL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL | 1.8 | 3.2 | 4.6 | 5.9 | 6.7 | 5.4 | 4.5 | 3.4 | 3.6 | 4.9 |
| -OIL | NA | NA | NA | NA | NA | 2.3 | 2.2 | 1.8 | 2.1 | 9.4 |
| COKE PLANTS | .0 | .1 | .1 | .1 | .1 | .0 | .0 | .0 | .0 | .0 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS FUEL OIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CEMENT PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| WILD FIRES | .5 | .5 | .5 | .5 | .5 | .5 | .0 | .0 | .0 | .2 |
| MISCELLANEOUS | 1.4 | 1.7 | 2.1 | 2.2 | 2.2 | 2.5 | 2.8 | 2.6 | 2.3 | 3.9 |

TABLE 6. NOX EMISSIONS (1000 TONS) 1950-1980 NEW MEXICO

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | |
| ELECTRIC UTILITIES | .5 | .1 | .3 | 24.7 | 69.2 | 85.4 | 100.7 | 126.3 |
| INDUSTRIAL BOILERS | 1.2 | 1.1 | 1.0 | .0 | .1 | .0 | .8 | .1 |
| COMMERCIAL-RESIDENTIAL | .2 | .1 | .2 | .1 | .0 | .0 | .0 | .2 |
| ANTHRACITE COAL | | | | | | | | |
| ALL USES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDUAL OIL | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .1 | .0 | .1 | .3 | .1 | .1 |
| INDUSTRIAL | .1 | .0 | .0 | .0 | .0 | .8 | 1.0 | 1.0 |
| COMMERCIAL | .0 | .0 | .0 | .0 | .0 | .2 | .1 | .0 |
| DISTILLATE OIL | | | | | | | | |
| ELECTRIC UTILITIES | .1 | .0 | .0 | .0 | .0 | 2.6 | .7 | .5 |
| INDUSTRIAL | .0 | .0 | .2 | .1 | .3 | .6 | .7 | .5 |
| COMMERCIAL-RESIDENTIAL | .2 | .4 | .3 | .2 | .3 | .4 | .6 | .4 |
| NATURAL GAS | | | | | | | | |
| ELECTRIC UTILITIES | 3.2 | 5.3 | 8.3 | 10.2 | 13.5 | 15.7 | 15.5 | 13.8 |
| INDUSTRIAL | 50.1 | 66.0 | 48.7 | 45.3 | 5.1 | 4.0 | 2.7 | 2.6 |
| PIPELINES | 3.0 | 10.7 | 21.2 | 31.1 | 97.9 | 84.5 | 76.1 | 94.0 |
| COMMERCIAL-RESIDENTIAL | .7 | .9 | 1.5 | 1.8 | 3.2 | 2.5 | 2.6 | 2.7 |
| WOOD | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | .0 | .1 | .1 | .1 | .1 | .1 | .1 | .1 |
| COMMERCIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDENTIAL | .8 | .6 | .5 | .4 | .3 | .3 | .5 | .6 |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE | 9.6 | 14.2 | 18.7 | 22.5 | 27.1 | 36.9 | 39.1 | 35.3 |
| DIESEL | 1.6 | 2.1 | 4.9 | 5.0 | 10.6 | 15.6 | 22.0 | 24.2 |
| OTHER | | | | | | | | |
| RAILROADS-COAL | 2.6 | .9 | .2 | .1 | .0 | .0 | .0 | .0 |
| -OIL | 8.0 | 8.4 | 7.9 | 14.1 | 11.1 | 11.1 | 18.3 | 11.1 |
| COKE PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS-DISTILLATE | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -RESIDUAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| OFF HIGHWAY DIESEL | 1.7 | 1.7 | 2.7 | 5.5 | 7.1 | 8.1 | 9.8 | 9.2 |
| CEMENT PLANT | .0 | .0 | .5 | .5 | .4 | .5 | .6 | .5 |
| WILD FIRES | 2.2 | .0 | .5 | .1 | .6 | .1 | .4 | .4 |
| MISCELLANEOUS | 6.1 | 5.1 | 4.3 | 6.3 | 7.6 | 4.6 | 4.1 | 3.4 |

TABLE 5. NOX EMISSIONS (1000 TONS) 1900-1945 NEW YORK

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | | | |
| ELECTRIC UTILITIES | 10.1 | 16.7 | 22.8 | 30.4 | 42.1 | 61.6 | 62.6 | 41.9 | 61.3 | 81.8 |
| INDUSTRIAL BOILERS | 54.4 | 73.7 | 90.6 | 106.6 | 111.3 | 116.7 | 99.2 | 81.5 | 92.2 | 106.4 |
| COMMERCIAL-RESIDENTIAL | 1.6 | 2.2 | 2.9 | 3.8 | 3.9 | 4.5 | 4.8 | 3.9 | 4.0 | 5.6 |
| ANTHRACITE COAL | | | | | | | | | | |
| ALL USES | 112.0 | 151.7 | 163.6 | 171.5 | 173.0 | 129.2 | 101.6 | 76.7 | 127.7 | 114.4 |
| RESIDUAL OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | 7.3 | 5.8 | 5.1 | 6.4 | 7.2 |
| INDUSTRIAL | NA | NA | NA | NA | NA | 7.4 | 7.1 | 7.0 | 7.5 | 8.1 |
| COMMERCIAL | NA | NA | NA | NA | NA | .1 | .1 | .2 | .2 | 1.0 |
| DISTILLATE OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | 1.5 | 1.2 | 1.0 | 1.7 | 2.4 |
| INDUSTRIAL | NA | NA | NA | NA | NA | .4 | .4 | .4 | .5 | 1.4 |
| COMMERCIAL-RESIDENTIAL | NA | NA | NA | NA | NA | .8 | 1.4 | 2.2 | 3.0 | 3.0 |
| NATURAL GAS | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .0 | .2 |
| INDUSTRIAL | NA | NA | 1.1 | .9 | .8 | .3 | 1.2 | 2.4 | 3.3 | 2.3 |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | .6 | .0 | .9 | .8 | .8 | .5 | 1.0 | 1.2 |
| WOOD | | | | | | | | | | |
| ALL USES | 3.3 | 3.1 | 3.0 | 2.8 | 2.7 | 2.6 | 2.4 | 2.3 | 2.3 | 2.1 |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE | .0 | .2 | 1.3 | 6.6 | 23.1 | 49.6 | 90.3 | 95.3 | 115.6 | 82.5 |
| DIESEL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL | 31.6 | 44.6 | 54.2 | 58.7 | 64.1 | 53.1 | 45.7 | 35.8 | 40.0 | 59.5 |
| -OIL | NA | NA | NA | NA | NA | 4.3 | 4.0 | 3.3 | 3.8 | 5.6 |
| COKE PLANTS | .1 | .1 | .2 | .2 | .4 | .6 | .7 | .5 | .7 | .8 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS FUEL OIL | NA | NA | NA | NA | NA | 55.5 | 65.8 | 52.2 | 30.4 | 33.2 |
| CEMENT PLANTS | .1 | .5 | .8 | 1.2 | 1.4 | 2.1 | 2.5 | 1.0 | 2.1 | NA |
| WILD FIRES | .6 | .6 | .6 | .6 | .6 | .6 | 1.6 | .5 | .3 | .2 |
| MISCELLANEOUS | 37.2 | 41.6 | 46.6 | 46.6 | 46.6 | 56.5 | 64.3 | 56.1 | 46.7 | 72.4 |

TABLE 6. NOX EMISSIONS (1000 TONS) 1950-1980 NEW YORK

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | |
| ELECTRIC UTILITIES | 104.2 | 129.6 | 140.1 | 156.3 | 133.2 | 70.8 | 72.7 | 67.6 |
| INDUSTRIAL BOILERS | 69.3 | 64.8 | 47.6 | 60.4 | 50.5 | 20.1 | 22.1 | 25.9 |
| COMMERCIAL-RESIDENTIAL | 3.1 | 2.0 | 2.1 | 1.6 | .4 | .4 | .2 | 1.8 |
| ANTHRACITE COAL | | | | | | | | |
| ALL USES | 103.9 | 55.5 | 30.3 | 13.0 | 7.6 | 3.1 | 4.1 | 3.0 |
| RESIDUAL OIL | | | | | | | | |
| ELECTRIC UTILITIES | 26.1 | 8.4 | 12.3 | 27.8 | 68.7 | 101.7 | 99.2 | 73.4 |
| INDUSTRIAL | 10.8 | 11.3 | 13.1 | 11.8 | 19.2 | 7.2 | 11.1 | 17.0 |
| COMMERCIAL | .4 | .8 | 21.3 | 30.1 | 34.4 | 26.6 | 30.5 | 14.3 |
| DISTILLATE OIL | | | | | | | | |
| ELECTRIC UTILITIES | 2.6 | .4 | .3 | .3 | 5.6 | 11.0 | 7.9 | 1.3 |
| INDUSTRIAL | 3.6 | 3.8 | 2.4 | 3.8 | 1.8 | 1.5 | 4.2 | 4.6 |
| COMMERCIAL-RESIDENTIAL | 4.6 | 4.2 | 32.0 | 37.4 | 40.3 | 35.8 | 37.7 | 21.5 |
| NATURAL GAS | | | | | | | | |
| ELECTRIC UTILITIES | .0 | 6.2 | 14.2 | 16.8 | 26.0 | 3.3 | .3 | 30.5 |
| INDUSTRIAL | 3.9 | 19.2 | 28.6 | 36.1 | 8.1 | 7.3 | 6.4 | 8.0 |
| PIPELINES | .1 | 1.2 | 3.6 | 4.1 | 4.6 | 4.0 | 4.4 | 4.6 |
| COMMERCIAL-RESIDENTIAL | 2.7 | 9.4 | 14.4 | 18.7 | 24.3 | 22.8 | 23.7 | 24.8 |
| WOOD | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | 1.8 | 2.2 | 2.3 | 2.6 | 2.8 | 2.7 | 3.4 | 3.7 |
| COMMERCIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDENTIAL | 3.4 | 2.6 | 2.1 | 1.7 | 1.8 | 1.8 | 3.0 | 4.1 |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE | 139.1 | 174.0 | 199.0 | 236.3 | 321.0 | 299.4 | 309.1 | 290.2 |
| DIESEL | 5.0 | 5.8 | 6.2 | 22.7 | 35.1 | 38.5 | 48.8 | 48.0 |
| OTHER | | | | | | | | |
| RAILROADS-COAL | 25.7 | 5.2 | .6 | .0 | .0 | .0 | .0 | .0 |
| -OIL | 20.7 | 35.3 | 34.7 | 27.5 | 20.5 | 13.2 | 16.2 | 10.8 |
| COKE PLANTS | .2 | .1 | .1 | .1 | .1 | .1 | .1 | .1 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS-DISTILLATE | 4.0 | 5.9 | 6.1 | 2.0 | 2.1 | 1.6 | 1.6 | 2.0 |
| -RESIDUAL | 19.0 | 20.5 | 17.5 | 18.5 | 20.8 | 9.7 | 7.5 | 14.2 |
| OFF HIGHWAY DIESEL | 4.0 | 4.9 | 7.3 | 7.2 | 9.0 | 10.1 | 15.4 | 8.4 |
| CEMENT PLANT | 3.3 | 4.6 | 4.6 | 6.8 | 6.2 | 4.3 | 4.9 | 4.3 |
| WILD FIRES | .2 | .5 | .1 | .2 | .1 | .1 | .6 | .1 |
| MISCELLANEOUS | 107.5 | 88.9 | 72.0 | 83.7 | 90.4 | 42.6 | 31.3 | 24.8 |

TABLE 5. NOX EMISSIONS (1000 TONS) 1900-1945 NORTH CAROLINA

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | | | |
| ELECTRIC UTILITIES | .7 | 1.1 | 1.5 | 2.0 | 4.0 | 8.2 | 10.1 | 8.0 | 13.8 | 21.7 |
| INDUSTRIAL BOILERS | 2.1 | 3.7 | 5.5 | 7.7 | 12.1 | 16.8 | 19.5 | 17.9 | 22.4 | 28.2 |
| COMMERCIAL-RESIDENTIAL | .5 | 1.0 | 1.5 | 2.3 | 2.6 | 2.9 | 3.6 | 3.5 | 4.2 | 6.8 |
| ANTHRACITE COAL | | | | | | | | | | |
| ALL USES | .3 | .5 | .5 | .5 | .5 | .4 | NA | NA | NA | NA |
| RESIDUAL OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDUSTRIAL | NA | NA | NA | NA | NA | .1 | .1 | .1 | .2 | .2 |
| COMMERCIAL | NA | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .0 |
| DISTILLATE OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .2 | .1 | .1 | .2 | .4 |
| INDUSTRIAL | NA | NA | NA | NA | NA | .0 | .0 | .0 | .1 | .1 |
| COMMERCIAL-RESIDENTIAL | NA | NA | NA | NA | NA | .1 | .1 | .1 | .3 | .4 |
| NATURAL GAS | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| WOOD | | | | | | | | | | |
| ALL USES | 6.9 | 6.5 | 6.2 | 6.0 | 5.7 | 5.4 | 5.1 | 4.9 | 4.8 | 4.5 |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE | .0 | .0 | .3 | 1.3 | 4.6 | 10.0 | 15.5 | 19.0 | 27.4 | 27.1 |
| DIESEL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL | 2.6 | 4.7 | 7.0 | 9.1 | 11.0 | 9.6 | 8.7 | 7.2 | 8.3 | 12.6 |
| -OIL | NA | NA | NA | NA | NA | .3 | .3 | .2 | .8 | 2.8 |
| COKE PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS FUEL OIL | NA | NA | NA | NA | NA | .1 | .1 | .1 | .2 | 2.1 |
| CEMENT PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| WILD FIRES | 9.3 | 9.3 | 9.3 | 9.3 | 9.3 | 9.3 | 7.6 | 2.2 | 7.7 | 7.7 |
| MISCELLANEOUS | 10.1 | 10.9 | 11.8 | 11.8 | 11.9 | 14.7 | 16.9 | 14.6 | 12.0 | 19.7 |

TABLE 6. NOX EMISSIONS (1000 TONS) 1950-1980 NORTH CAROLINA

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | |
| ELECTRIC UTILITIES | 37.1 | 54.4 | 63.1 | 110.3 | 219.4 | 228.0 | 228.0 | 264.0 |
| INDUSTRIAL BOILERS | 22.7 | 21.2 | 21.1 | 21.6 | 20.0 | 11.8 | 14.4 | 13.0 |
| COMMERCIAL-RESIDENTIAL | 4.6 | 2.9 | 5.0 | 2.7 | 2.6 | 1.2 | .3 | .9 |
| ANTHRACITE COAL | | | | | | | | |
| ALL USES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDUAL OIL | | | | | | | | |
| ELECTRIC UTILITIES | .1 | .1 | .1 | .1 | .7 | .0 | .7 | .0 |
| INDUSTRIAL | .5 | 1.5 | 3.5 | 3.8 | 4.9 | 6.3 | 11.8 | 9.8 |
| COMMERCIAL | .2 | .4 | .4 | .2 | .8 | .8 | 1.1 | .3 |
| DISTILLATE OIL | | | | | | | | |
| ELECTRIC UTILITIES | .4 | .2 | .0 | .0 | 2.4 | .6 | 2.3 | .9 |
| INDUSTRIAL | .3 | .3 | .4 | .7 | .6 | 1.6 | 2.1 | 1.4 |
| COMMERCIAL-RESIDENTIAL | 1.7 | 3.6 | 7.9 | 8.4 | 9.6 | 5.9 | 5.4 | 4.6 |
| NATURAL GAS | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | 1.1 | .6 | 5.2 | .0 | .0 | .4 |
| INDUSTRIAL | .0 | 2.4 | 9.2 | 15.4 | 5.3 | 4.3 | 1.7 | 6.0 |
| PIPELINES | .0 | 2.5 | 3.0 | 5.3 | 7.7 | 4.4 | 3.2 | 7.3 |
| COMMERCIAL-RESIDENTIAL | .0 | .2 | .6 | 1.1 | 2.4 | 2.5 | 2.8 | 3.0 |
| WOOD | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | 1.6 | 1.9 | 2.0 | 2.6 | 3.2 | 3.2 | 4.9 | 4.9 |
| COMMERCIAL | .1 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDENTIAL | 5.7 | 4.4 | 3.6 | 2.5 | 1.7 | 1.7 | 2.6 | 3.7 |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE | 59.2 | 78.7 | 91.9 | 116.2 | 142.5 | 171.0 | 178.6 | 157.6 |
| DIESEL | 2.0 | 2.5 | 5.2 | 9.5 | 25.3 | 35.8 | 51.6 | 55.2 |
| OTHER | | | | | | | | |
| RAILROADS-COAL | 6.9 | 2.1 | .4 | .0 | .0 | .0 | .0 | .0 |
| -OIL | 8.4 | 17.0 | 14.2 | 19.9 | 13.9 | 11.9 | 10.8 | 11.5 |
| COKE PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS-DISTILLATE | .1 | .1 | .2 | .1 | .1 | .1 | .2 | .2 |
| -RESIDUAL | .0 | .2 | .1 | .2 | .3 | .2 | .1 | .1 |
| OFF HIGHWAY DIESEL | 3.3 | 4.2 | 2.9 | 2.2 | 5.4 | 6.6 | 9.2 | 3.9 |
| CEMENT PLANT | .0 | .0 | .0 | .7 | .5 | .5 | 1.1 | 1.0 |
| WILD FIRES | 8.7 | 12.2 | 1.5 | 1.4 | 1.5 | .3 | .8 | .9 |
| MISCELLANEOUS | 30.7 | 25.1 | 20.1 | 25.0 | 28.0 | 14.1 | 10.9 | 8.8 |

TABLE 5. NOX EMISSIONS (1000 TONS) 1900-1945 NORTH DAKOTA

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | | | |
| ELECTRIC UTILITIES | .4 | .7 | .9 | 1.3 | 1.4 | 1.5 | 1.4 | 1.0 | 1.5 | 2.2 |
| INDUSTRIAL BOILERS | .5 | 1.0 | 1.6 | 2.4 | 2.3 | 1.5 | 1.1 | 1.0 | 1.2 | 1.5 |
| COMMERCIAL-RESIDENTIAL | .5 | 1.0 | 1.7 | 2.8 | 3.1 | 3.6 | 3.7 | 2.8 | 2.7 | 3.4 |
| ANTHRACITE COAL | | | | | | | | | | |
| ALL USES | 1.9 | 2.6 | 2.8 | 3.0 | 3.0 | 2.2 | NA | NA | NA | NA |
| RESIDUAL OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .0 | .0 | .0 | .0 | NA |
| INDUSTRIAL | NA | NA | NA | NA | NA | .0 | .0 | .0 | NA | .0 |
| COMMERCIAL | NA | NA | NA | NA | NA | .0 | .0 | .0 | NA | .0 |
| DISTILLATE OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .1 | .0 | .0 | .0 | .1 |
| INDUSTRIAL | NA | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .0 |
| COMMERCIAL-RESIDENTIAL | NA | NA | NA | NA | NA | .0 | .0 | .0 | .1 | .1 |
| NATURAL GAS | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | .0 | .0 | .0 | NA | NA | .1 |
| INDUSTRIAL | NA | NA | .0 | NA | NA | .0 | NA | NA | NA | NA |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | .0 | .0 | .0 | NA | NA | NA | NA | NA |
| WOOD | | | | | | | | | | |
| ALL USES | .1 | .1 | .1 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE | .0 | .0 | .1 | .4 | 1.5 | 3.2 | 4.1 | 5.0 | 5.3 | 4.5 |
| DIESEL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL | 2.0 | 4.2 | 7.0 | 9.7 | 11.3 | 9.1 | 7.6 | 5.7 | 6.0 | 8.2 |
| -OIL | NA | NA | NA | NA | NA | .0 | .0 | .0 | .3 | 5.3 |
| COKE PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS FUEL OIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CEMENT PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| WILD FIRES | NA | NA | NA | NA | NA | NA | NA | NA | .6 | 1.0 |
| MISCELLANEOUS | 1.7 | 2.3 | 3.0 | 3.0 | 3.0 | 3.4 | 3.6 | 3.3 | 3.1 | 3.9 |

TABLE 6. NOX EMISSIONS (1000 TONS) 1950-1980 NORTH DAKOTA

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | |
| ELECTRIC UTILITIES | 7.0 | 6.3 | 7.1 | 6.7 | 20.2 | 35.5 | 62.1 | 85.8 |
| INDUSTRIAL BOILERS | 1.9 | 1.8 | 2.1 | 1.7 | 2.3 | 2.4 | 3.4 | 3.0 |
| COMMERCIAL-RESIDENTIAL | 2.9 | 1.8 | 1.8 | .9 | .6 | .3 | .2 | .5 |
| ANTHRACITE COAL | | | | | | | | |
| ALL USES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDUAL OIL | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | .0 | .4 | .6 | .7 | .6 | .5 | .5 | .3 |
| COMMERCIAL | .0 | .0 | .0 | .1 | .0 | .4 | .3 | .2 |
| DISTILLATE OIL | | | | | | | | |
| ELECTRIC UTILITIES | .2 | .1 | .0 | .0 | .0 | .0 | .2 | .1 |
| INDUSTRIAL | .0 | .0 | .0 | .1 | .1 | .1 | .0 | .3 |
| COMMERCIAL-RESIDENTIAL | .3 | .5 | 1.3 | 1.4 | 1.3 | .8 | .5 | 1.0 |
| NATURAL GAS | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .1 | .0 | .0 | .0 |
| INDUSTRIAL | 1.3 | 2.7 | 2.8 | 4.1 | .1 | .1 | .2 | .1 |
| PIPELINES | .0 | .0 | .0 | .0 | 17.6 | 15.1 | 15.4 | 1.5 |
| COMMERCIAL-RESIDENTIAL | .1 | .2 | .3 | .6 | .8 | 1.1 | 1.2 | 1.0 |
| WOOD | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| COMMERCIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDENTIAL | .1 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE | 9.8 | 12.0 | 13.8 | 17.3 | 18.7 | 21.4 | 22.6 | 20.4 |
| DIESEL | 1.2 | 1.8 | 1.1 | 2.0 | 8.1 | 6.1 | 8.1 | 11.4 |
| OTHER | | | | | | | | |
| RAILROADS-COAL | 4.5 | 1.5 | .3 | .1 | .1 | .0 | .0 | .0 |
| -OIL | 4.1 | 4.4 | 3.2 | 4.5 | 4.8 | 6.3 | 8.8 | 10.1 |
| COKE PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS-DISTILLATE | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -RESIDUAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| OFF HIGHWAY DIESEL | 1.6 | 2.2 | 6.1 | 5.8 | 3.6 | 2.5 | 1.1 | 1.2 |
| CEMENT PLANT | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| WILD FIRES | .0 | .4 | .8 | .0 | .3 | .2 | 1.4 | 1.9 |
| MISCELLANEOUS | 4.7 | 4.5 | 4.2 | 3.8 | 3.6 | 2.3 | 2.2 | 2.0 |

TABLE 5. NOX EMISSIONS (1000 TONS) 1900-1945 OHIO

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | | | |
| ELECTRIC UTILITIES | 11.5 | 19.1 | 26.1 | 34.9 | 42.0 | 49.4 | 49.5 | 37.4 | 62.2 | 94.6 |
| INDUSTRIAL BOILERS | 97.0 | 130.6 | 159.1 | 185.7 | 192.4 | 200.4 | 171.4 | 142.7 | 163.5 | 191.0 |
| COMMERCIAL-RESIDENTIAL | 6.4 | 8.9 | 11.5 | 14.8 | 15.5 | 17.6 | 20.1 | 17.8 | 20.2 | 30.6 |
| ANTHRACITE COAL | | | | | | | | | | |
| ALL USES | 3.2 | 4.4 | 4.7 | 4.9 | 5.0 | 3.7 | .7 | .6 | .9 | .9 |
| RESIDUAL OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .1 | .0 | .0 | .1 | .1 |
| INDUSTRIAL | NA | NA | NA | NA | NA | 7.5 | 7.1 | 7.1 | 7.4 | 12.8 |
| COMMERCIAL | NA | NA | NA | NA | NA | .1 | .1 | .2 | .1 | .0 |
| DISTILLATE OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .0 | .0 | .0 | .1 | .1 |
| INDUSTRIAL | NA | NA | NA | NA | NA | .2 | .2 | .2 | .4 | 1.2 |
| COMMERCIAL-RESIDENTIAL | NA | NA | NA | NA | NA | .0 | .1 | .1 | .2 | .4 |
| NATURAL GAS | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | .2 | .4 | 1.0 | .2 | .2 | .1 |
| INDUSTRIAL | NA | NA | 28.5 | 41.8 | 24.1 | 16.7 | 20.7 | 17.4 | 24.2 | 27.8 |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | 3.0 | 3.9 | 4.8 | 4.2 | 4.5 | 2.1 | 4.0 | 5.2 |
| WOOD | | | | | | | | | | |
| ALL USES | 3.3 | 3.1 | 3.0 | 2.9 | 2.7 | 2.6 | 2.5 | 2.4 | 2.3 | 2.1 |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE | .0 | .1 | .9 | 4.8 | 16.8 | 36.1 | 57.3 | 59.7 | 81.6 | 69.2 |
| DIESEL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL | 28.3 | 39.6 | 47.8 | 51.3 | 55.7 | 46.2 | 39.7 | 31.1 | 34.8 | 51.7 |
| -OIL | NA | NA | NA | NA | NA | .8 | .8 | .6 | 1.4 | 4.7 |
| COKE PLANTS | .4 | .5 | .6 | .6 | 1.0 | 1.3 | 1.5 | 1.1 | 1.7 | 2.0 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS FUEL OIL | NA | NA | NA | NA | NA | .4 | .5 | .4 | .9 | .8 |
| CEMENT PLANTS | .1 | .3 | .4 | .5 | .5 | 1.4 | 2.1 | 1.0 | 1.6 | 1.1 |
| WILD FIRES | .4 | .4 | .4 | .4 | .4 | .4 | .7 | .3 | .3 | .1 |
| MISCELLANEOUS | 22.5 | 24.1 | 25.9 | 26.0 | 26.1 | 31.6 | 36.0 | 31.6 | 26.6 | 41.3 |

TABLE 6. NOX EMISSIONS (1000 TONS) 1950-1980 OHIO

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | |
| ELECTRIC UTILITIES | 141.6 | 187.1 | 247.9 | 286.6 | 427.2 | 533.7 | 561.6 | 582.2 |
| INDUSTRIAL BOILERS | 129.6 | 121.1 | 137.0 | 161.1 | 148.6 | 79.2 | 70.6 | 52.2 |
| COMMERCIAL-RESIDENTIAL | 25.2 | 15.9 | 16.8 | 11.1 | 9.4 | 3.7 | 1.8 | 2.8 |
| ANTHRACITE COAL | | | | | | | | |
| ALL USES | .6 | 1.1 | 1.4 | 1.2 | 1.4 | .5 | .5 | .8 |
| RESIDUAL OIL | | | | | | | | |
| ELECTRIC UTILITIES | .4 | .1 | .1 | .1 | 1.0 | .7 | 2.3 | .1 |
| INDUSTRIAL | 18.9 | 19.7 | 11.9 | 10.3 | 5.0 | 6.4 | 8.6 | 6.3 |
| COMMERCIAL | .0 | .3 | .4 | .3 | .3 | 1.7 | 1.9 | .2 |
| DISTILLATE OIL | | | | | | | | |
| ELECTRIC UTILITIES | .4 | .3 | .2 | .3 | 1.4 | 5.9 | 8.9 | 3.2 |
| INDUSTRIAL | 1.9 | 2.1 | 1.7 | 1.6 | 2.2 | 3.9 | 5.6 | 4.4 |
| COMMERCIAL-RESIDENTIAL | 1.0 | 1.7 | 5.9 | 7.7 | 8.1 | 7.4 | 9.5 | 4.5 |
| NATURAL GAS | | | | | | | | |
| ELECTRIC UTILITIES | .6 | 1.1 | .7 | .5 | 5.3 | 1.5 | .8 | 1.2 |
| INDUSTRIAL | 41.5 | 56.8 | 75.3 | 103.9 | 26.1 | 23.9 | 22.7 | 22.3 |
| PIPELINES | 4.0 | 5.8 | 11.4 | 13.8 | 18.9 | 14.9 | 15.5 | 16.7 |
| COMMERCIAL-RESIDENTIAL | 10.6 | 16.7 | 23.5 | 26.9 | 32.2 | 29.9 | 29.5 | .3 |
| WOOD | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | .9 | 1.1 | 1.2 | 1.6 | 1.8 | 1.9 | 2.7 | 2.7 |
| COMMERCIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDENTIAL | 2.6 | 2.0 | 1.6 | 1.3 | 1.5 | 1.6 | 2.5 | 3.4 |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE | 123.8 | 156.7 | 175.7 | 208.8 | 264.6 | 297.4 | 298.2 | 271.2 |
| DIESEL | 3.7 | 4.8 | 9.2 | 24.3 | 49.4 | 75.1 | 92.9 | 102.1 |
| OTHER | | | | | | | | |
| RAILROADS-COAL | 22.3 | 4.5 | .5 | .0 | .0 | .0 | .0 | .0 |
| -OIL | 19.1 | 37.4 | 47.5 | 42.6 | 28.2 | 29.7 | 31.0 | 59.0 |
| COKE PLANTS | .3 | .3 | .2 | .2 | .3 | .3 | .2 | .2 |
| SHELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS-DISTILLATE | .3 | .2 | .3 | .5 | .2 | .6 | .5 | .3 |
| -RESIDUAL | .2 | .2 | .3 | .6 | .5 | .7 | .8 | .3 |
| OFF HIGHWAY DIESEL | 3.3 | 7.1 | 9.5 | 15.7 | 23.7 | 16.3 | 20.3 | 20.7 |
| CEMENT PLANT | 2.6 | 3.4 | 4.1 | 3.6 | 2.9 | 3.0 | 2.6 | 2.2 |
| WILD FIRES | .3 | .1 | .1 | .1 | .1 | .0 | .1 | .1 |
| MISCELLANEOUS | 61.5 | 52.3 | 44.1 | 54.7 | 61.4 | 32.3 | 26.0 | 21.3 |

TABLE 5. NOX EMISSIONS (1000 TONS) 1900-1945 OKLAHOMA

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | | | |
| ELECTRIC UTILITIES | .3 | .6 | .8 | 1.1 | 2.0 | 3.9 | 4.1 | 2.4 | 2.9 | 3.0 |
| INDUSTRIAL BOILERS | 1.3 | 2.7 | 4.4 | 6.6 | 6.6 | 5.3 | 3.7 | 2.7 | 2.6 | 2.5 |
| COMMERCIAL-RESIDENTIAL | .4 | .8 | 1.3 | 2.2 | 2.4 | 2.8 | 2.7 | 1.8 | 1.5 | 1.6 |
| ANTHRACITE COAL | | | | | | | | | | |
| ALL USES | .0 | .0 | .0 | .0 | .0 | .0 | NA | NA | NA | NA |
| RESIDUAL OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .2 | .2 | .2 | .2 | .4 |
| INDUSTRIAL | NA | NA | NA | NA | NA | 3.0 | 2.9 | 2.8 | 2.4 | 2.4 |
| COMMERCIAL | NA | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .0 |
| DISTILLATE OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .1 | .0 | .0 | .1 | .1 |
| INDUSTRIAL | NA | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .0 |
| COMMERCIAL-RESIDENTIAL | NA | NA | NA | NA | NA | .0 | .0 | .0 | .1 | .2 |
| NATURAL GAS | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | .3 | .6 | 1.6 | 2.0 | 2.9 | 5.5 |
| INDUSTRIAL | NA | NA | 13.5 | 33.4 | 64.2 | 114.3 | 169.3 | 63.7 | 88.8 | 82.5 |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | .3 | .5 | 1.0 | .8 | 1.4 | .9 | 1.7 | 2.4 |
| WOOD | | | | | | | | | | |
| ALL USES | 1.1 | 1.1 | 1.0 | 1.0 | .9 | .9 | .9 | .8 | .8 | .7 |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE | .0 | .0 | .3 | 1.3 | 4.6 | 9.9 | 18.6 | 19.0 | 23.6 | 19.1 |
| DIESEL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL | 2.6 | 5.5 | 9.1 | 12.6 | 14.8 | 11.9 | 9.9 | 7.5 | 7.9 | 10.7 |
| -OIL | NA | NA | NA | NA | NA | 59.3 | 55.8 | 45.7 | 44.6 | 46.1 |
| COKE PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| SHELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS FUEL OIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | .0 |
| CEMENT PLANTS | .0 | .0 | NA | NA | NA | NA | NA | NA | NA | NA |
| WILD FIRES | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 40.4 | 9.9 | 60.2 | 27.2 |
| MISCELLANEOUS | 5.7 | 8.0 | 10.5 | 10.7 | 10.8 | 13.1 | 14.9 | 13.3 | 11.4 | 16.0 |

TABLE 6. NOX EMISSIONS (1000 TONS) 1950-1980 OKLAHOMA

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | |
| ELECTRIC UTILITIES | .5 | .0 | .0 | .0 | .0 | .0 | 17.0 | 92.0 |
| INDUSTRIAL BOILERS | .0 | 4.2 | 2.5 | 2.8 | .0 | .2 | 3.5 | 4.0 |
| COMMERCIAL-RESIDENTIAL | .1 | .0 | .1 | .0 | .0 | .0 | .0 | .1 |
| ANTHRACITE COAL | | | | | | | | |
| ALL USES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDUAL OIL | | | | | | | | |
| ELECTRIC UTILITIES | .3 | .0 | .0 | .0 | .0 | .1 | .0 | .0 |
| INDUSTRIAL | 1.4 | 1.5 | 1.6 | .6 | .6 | .6 | 1.1 | .8 |
| COMMERCIAL | .0 | .0 | .0 | .0 | .0 | .1 | .0 | .0 |
| DISTILLATE OIL | | | | | | | | |
| ELECTRIC UTILITIES | .4 | .1 | .1 | .1 | .1 | .9 | .7 | .0 |
| INDUSTRIAL | .1 | .1 | .1 | .1 | .1 | .9 | 1.2 | .8 |
| COMMERCIAL-RESIDENTIAL | .5 | .5 | .2 | .5 | .5 | .8 | 1.3 | .2 |
| NATURAL GAS | | | | | | | | |
| ELECTRIC UTILITIES | 8.6 | 15.9 | 20.3 | 31.0 | 57.5 | 73.7 | 85.2 | 80.8 |
| INDUSTRIAL | 84.6 | 89.2 | 56.2 | 80.2 | 8.4 | 10.0 | 13.4 | 13.0 |
| PIPELINES | 8.9 | 8.2 | 11.2 | 15.7 | 151.5 | 129.3 | 126.4 | 103.3 |
| COMMERCIAL-RESIDENTIAL | 2.9 | 3.7 | 4.4 | 4.6 | 6.1 | 6.1 | 6.5 | 6.2 |
| WOOD | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | .0 | .1 | .1 | .1 | .0 | .4 | .6 | .6 |
| COMMERCIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDENTIAL | 1.2 | .9 | .7 | .5 | .5 | .6 | .9 | 1.2 |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE | 36.0 | 46.0 | 53.4 | 66.1 | 86.1 | 105.7 | 112.1 | 104.1 |
| DIESEL | 1.7 | 2.0 | 4.3 | 4.8 | 13.8 | 24.2 | 36.5 | 43.9 |
| OTHER | | | | | | | | |
| RAILROADS-COAL | 5.8 | 1.9 | .4 | .2 | .1 | .0 | .0 | .0 |
| -OIL | 30.5 | 10.0 | 4.8 | 6.0 | 5.7 | 5.6 | 4.6 | 5.9 |
| COKE PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS-DISTILLATE | .0 | .1 | .0 | .5 | .1 | .0 | .0 | .0 |
| -RESIDUAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| OFF HIGHWAY DIESEL | 1.3 | 1.4 | 5.3 | 6.0 | 10.7 | 10.0 | 18.4 | 9.0 |
| CEMENT PLANT | 1.3 | 1.7 | 1.9 | 2.1 | 1.6 | 1.7 | 2.2 | 2.1 |
| WILD FIRES | 30.4 | 2.3 | 5.3 | 10.5 | 1.7 | 3.8 | 4.4 | 1.6 |
| MISCELLANEOUS | 21.4 | 21.5 | 21.8 | 23.0 | 24.3 | 17.8 | 17.4 | 15.7 |

TABLE 5. NOX EMISSIONS (1000 TONS) 1900-1945 OREGON

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL BOILERS | .8 | 1.4 | 2.0 | 2.8 | 2.4 | 1.5 | 1.3 | 1.6 | 2.4 | 3.4 |
| COMMERCIAL-RESIDENTIAL | .2 | .3 | .4 | .6 | .7 | .8 | .9 | .7 | .7 | 1.0 |
| ANTHRACITE COAL | | | | | | | | | | |
| ALL USES | .0 | .0 | .0 | .0 | .0 | .0 | NA | NA | NA | NA |
| RESIDUAL OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | 2.5 | 2.0 | 1.7 | 1.5 | 2.5 |
| INDUSTRIAL | NA | NA | NA | NA | NA | 2.0 | 1.9 | 1.9 | 1.8 | 2.1 |
| COMMERCIAL | NA | NA | NA | NA | NA | .0 | .1 | .1 | .2 | .5 |
| DISTILLATE OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | 2.6 | 2.1 | 1.8 | .0 | .4 |
| INDUSTRIAL | NA | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .1 |
| COMMERCIAL-RESIDENTIAL | NA | NA | NA | NA | NA | .0 | .1 | .1 | .2 | .2 |
| NATURAL GAS | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | NA | NA | .0 | .0 | NA | .0 | .0 | .0 | .0 | .0 |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| WOOD | | | | | | | | | | |
| ALL USES | 5.8 | 5.5 | 5.3 | 5.0 | 4.8 | 4.6 | 4.3 | 4.2 | 4.1 | 3.8 |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE | .0 | .0 | .2 | .8 | 2.9 | 6.2 | 9.7 | 10.1 | 14.5 | 14.5 |
| DIESEL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL | 1.5 | 2.6 | 3.8 | 4.9 | 5.5 | 4.5 | 3.7 | 2.8 | 3.0 | 4.0 |
| -OIL | NA | NA | NA | NA | NA | 52.9 | 49.7 | 40.8 | 38.6 | 69.0 |
| COKE PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS FUEL OIL | NA | NA | NA | NA | NA | 2.8 | 3.3 | 2.6 | 3.2 | 15.7 |
| CEMENT PLANTS | .0 | .0 | .0 | .0 | NA | NA | NA | NA | NA | NA |
| WILD FIRES | 8.5 | 8.5 | 8.5 | 8.5 | 8.5 | 8.5 | 7.4 | 9.7 | 5.2 | 27.4 |
| MISCELLANEOUS | 3.6 | 4.4 | 5.3 | 5.4 | 5.6 | 6.5 | 7.3 | 6.7 | 6.1 | 10.1 |

TABLE 6. NOX EMISSIONS (1000 TONS) 1950-1980 OREGON

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .6 | 12.5 |
| INDUSTRIAL BOILERS | 1.5 | 1.4 | 2.0 | 1.6 | .6 | .9 | 2.1 | 2.1 |
| COMMERCIAL-RESIDENTIAL | .7 | .4 | .6 | .5 | .2 | .0 | .0 | .1 |
| ANTHRACITE COAL | | | | | | | | |
| ALL USES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDUAL OIL | | | | | | | | |
| ELECTRIC UTILITIES | 3.5 | 3.6 | .0 | .0 | .1 | .0 | .0 | .0 |
| INDUSTRIAL | 2.7 | 3.2 | 2.1 | 1.8 | 2.4 | 1.9 | 2.3 | 2.9 |
| COMMERCIAL | .1 | .2 | 1.1 | 1.4 | 1.9 | 1.3 | .7 | .5 |
| DISTILLATE OIL | | | | | | | | |
| ELECTRIC UTILITIES | .1 | .1 | .0 | .0 | .0 | .6 | .1 | .6 |
| INDUSTRIAL | .4 | .6 | .7 | .7 | .9 | 1.3 | 2.0 | 1.0 |
| COMMERCIAL-RESIDENTIAL | .4 | .6 | 2.4 | 2.9 | 2.6 | 1.9 | 1.8 | 1.6 |
| NATURAL GAS | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .2 | .0 | .2 | .0 | .0 | .1 |
| INDUSTRIAL | .0 | .0 | 6.6 | 12.7 | 4.0 | 4.0 | 3.3 | 2.7 |
| PIPELINES | .0 | .0 | .1 | .9 | 6.9 | 9.9 | 10.9 | 7.0 |
| COMMERCIAL-RESIDENTIAL | .0 | .0 | .5 | .8 | 1.6 | 2.2 | 1.5 | 1.7 |
| WOOD | | | | | | | | |
| ELECTRIC UTILITIES | .3 | .1 | .0 | .0 | .1 | .0 | .0 | .0 |
| INDUSTRIAL | 2.1 | 2.4 | 2.6 | 3.1 | 3.4 | 3.4 | 4.5 | 3.9 |
| COMMERCIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDENTIAL | 2.4 | 1.9 | 1.5 | 1.1 | .7 | .8 | 1.1 | 1.4 |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE | 30.1 | 35.2 | 39.5 | 51.3 | 64.5 | 75.0 | 83.6 | 73.0 |
| DIESEL | 4.4 | 3.4 | 4.8 | 8.3 | 16.0 | 21.1 | 33.0 | 35.1 |
| OTHER | | | | | | | | |
| RAILROADS-COAL | 2.2 | .7 | .1 | .1 | .0 | .0 | .0 | .0 |
| -OIL | 40.1 | 21.3 | 15.2 | 15.1 | 15.6 | 17.3 | 22.9 | 22.5 |
| COKE PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS-DISTILLATE | .3 | .4 | .5 | .9 | .6 | .7 | .9 | .3 |
| -RESIDUAL | 1.0 | 1.3 | 1.1 | .6 | 1.1 | .4 | 2.3 | 1.4 |
| OFF HIGHWAY DIESEL | 3.9 | 6.6 | 8.7 | 9.9 | 4.4 | 3.1 | 5.7 | 11.9 |
| CEMENT PLANT | .4 | .5 | .5 | .9 | .5 | .6 | .7 | .7 |
| WILD FIRES | 3.0 | 5.7 | 10.1 | 1.9 | 5.3 | 1.5 | 1.8 | 6.9 |
| MISCELLANEOUS | 15.7 | 14.1 | 12.8 | 17.5 | 20.9 | 14.5 | 13.8 | 12.0 |

TABLE 5. NOX EMISSIONS (1000 TONS) 1900-1945 PENNSYLVANIA

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | | | |
| ELECTRIC UTILITIES | 8.0 | 13.2 | 18.0 | 24.1 | 37.5 | 62.9 | 67.3 | 45.7 | 68.2 | 93.0 |
| INDUSTRIAL BOILERS | 85.3 | 132.8 | 185.2 | 245.4 | 278.9 | 311.5 | 255.1 | 188.1 | 189.2 | 192.1 |
| COMMERCIAL-RESIDENTIAL | 1.5 | 2.5 | 3.6 | 5.3 | 5.8 | 6.6 | 7.4 | 6.3 | 6.9 | 10.2 |
| ANTHRACITE COAL | | | | | | | | | | |
| ALL USES | 125.5 | 169.9 | 183.3 | 192.2 | 193.9 | 144.8 | 56.2 | 42.5 | 70.7 | 79.8 |
| RESIDUAL OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | 1.6 | 1.3 | 1.2 | 1.9 | 3.6 |
| INDUSTRIAL | NA | NA | NA | NA | NA | 16.3 | 15.6 | 15.4 | 15.0 | 24.1 |
| COMMERCIAL | NA | NA | NA | NA | NA | .1 | .2 | .3 | .6 | 2.4 |
| DISTILLATE OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .3 | .2 | .2 | .0 | .4 |
| INDUSTRIAL | NA | NA | NA | NA | NA | .6 | .5 | .5 | .6 | 2.3 |
| COMMERCIAL-RESIDENTIAL | NA | NA | NA | NA | NA | .1 | .2 | .3 | .4 | 1.3 |
| NATURAL GAS | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | .0 | .0 | .0 | .1 | .1 | .0 |
| INDUSTRIAL | NA | NA | 75.3 | 75.0 | 57.1 | 37.7 | 33.3 | 24.7 | 34.5 | 38.2 |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | 2.2 | 2.6 | 3.3 | 2.8 | 2.6 | 1.3 | 2.4 | 2.8 |
| WOOD | | | | | | | | | | |
| ALL USES | 4.2 | 4.0 | 3.9 | 3.7 | 3.5 | 3.3 | 3.2 | 3.0 | 3.0 | 2.8 |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE | .0 | .1 | .6 | 3.3 | 11.5 | 24.7 | 55.4 | 69.7 | 93.5 | 72.1 |
| DIESEL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL | 11.7 | 19.0 | 26.3 | 32.2 | 36.8 | 30.5 | 26.2 | 20.5 | 23.0 | 34.1 |
| -OIL | NA | NA | NA | NA | NA | 2.4 | 2.3 | 1.8 | 2.0 | 5.1 |
| COKE PLANTS | 2.0 | 2.7 | 4.0 | 4.5 | 5.1 | 3.9 | 3.5 | 2.5 | 3.9 | 4.4 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS FUEL OIL | NA | NA | NA | NA | NA | 24.1 | 28.6 | 22.7 | 16.9 | 29.9 |
| CEMENT PLANTS | 1.2 | 3.4 | 6.5 | 7.0 | 6.9 | 10.3 | 9.2 | 3.8 | 6.6 | 3.8 |
| WILD FIRES | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 6.8 | 1.6 | .7 | .6 |
| MISCELLANEOUS | 34.2 | 37.7 | 41.6 | 41.9 | 42.0 | 47.9 | 52.5 | 48.0 | 42.8 | 60.8 |

TABLE 6. NOX EMISSIONS (1000 TONS) 1950-1980 PENNSYLVANIA

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | |
| ELECTRIC UTILITIES | 149.8 | 177.4 | 177.5 | 241.8 | 326.4 | 411.4 | 363.7 | 476.1 |
| INDUSTRIAL BOILERS | 87.7 | 82.0 | 99.2 | 51.0 | 69.2 | 43.7 | 39.4 | 40.7 |
| COMMERCIAL-RESIDENTIAL | 8.1 | 5.1 | 6.2 | 3.9 | 4.1 | 1.1 | 1.0 | 7.6 |
| ANTHRACITE COAL | | | | | | | | |
| ALL USES | 103.5 | 80.1 | 74.0 | 62.1 | 51.2 | 35.8 | 37.8 | 24.3 |
| RESIDUAL OIL | | | | | | | | |
| ELECTRIC UTILITIES | 4.3 | 3.3 | 4.0 | 4.8 | 27.0 | 14.1 | 31.0 | 20.2 |
| INDUSTRIAL | 33.7 | 34.6 | 27.9 | 25.7 | 21.5 | 16.6 | 23.3 | 13.2 |
| COMMERCIAL | .4 | .4 | 5.6 | 6.2 | 8.4 | 7.1 | 6.2 | 1.0 |
| DISTILLATE OIL | | | | | | | | |
| ELECTRIC UTILITIES | .7 | .2 | .2 | .2 | 7.0 | 5.6 | 5.8 | 3.9 |
| INDUSTRIAL | 3.8 | 4.9 | 3.0 | 3.1 | 2.2 | 3.4 | 4.1 | 4.7 |
| COMMERCIAL-RESIDENTIAL | 1.8 | 1.7 | 14.4 | 16.7 | 18.6 | 16.7 | 17.1 | 14.5 |
| NATURAL GAS | | | | | | | | |
| ELECTRIC UTILITIES | .4 | .8 | 1.5 | .2 | 2.3 | .3 | .1 | .7 |
| INDUSTRIAL | 48.4 | 61.4 | 72.2 | 95.9 | 23.6 | 18.3 | 17.5 | 23.5 |
| PIPELINES | 4.2 | 11.2 | 18.9 | 24.2 | 36.1 | 24.3 | 33.0 | 38.5 |
| COMMERCIAL-RESIDENTIAL | 6.6 | 10.3 | 14.4 | 16.2 | 19.8 | 18.6 | 19.8 | 20.3 |
| WOOD | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | 1.1 | 1.3 | 1.4 | 1.8 | 2.3 | 2.6 | 3.2 | 3.5 |
| COMMERCIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDENTIAL | 3.4 | 2.6 | 2.1 | 1.7 | 1.7 | 1.7 | 3.0 | 4.3 |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE | 129.4 | 162.0 | 184.4 | 208.7 | 268.4 | 295.8 | 310.5 | 270.3 |
| DIESEL | 3.7 | 4.2 | 13.3 | 24.6 | 49.3 | 81.1 | 92.1 | 101.8 |
| OTHER | | | | | | | | |
| RAILROADS-COAL | 14.7 | 3.0 | .4 | .0 | .0 | .0 | .0 | .0 |
| -OIL | 31.4 | 46.0 | 39.1 | 36.0 | 28.6 | 24.1 | 31.8 | 33.9 |
| COKE PLANTS | .5 | .6 | .4 | .6 | .5 | .5 | .4 | .3 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS-DISTILLATE | .7 | 1.3 | .8 | .4 | .5 | .6 | .7 | .7 |
| -RESIDUAL | 4.1 | 8.9 | 5.6 | 4.5 | 5.0 | 4.5 | 5.0 | 5.7 |
| OFF HIGHWAY DIESEL | 2.6 | 3.7 | 3.7 | 11.1 | 7.5 | 18.0 | 28.2 | 20.5 |
| CEMENT PLANT | 9.4 | 11.5 | 9.1 | 9.6 | 10.2 | 7.6 | 8.8 | 7.1 |
| WILD FIRES | .8 | .7 | .7 | .3 | .1 | .1 | .1 | .2 |
| MISCELLANEOUS | 82.5 | 73.3 | 65.0 | 69.5 | 72.8 | 44.1 | 39.1 | 34.4 |

TABLE 5. NOX EMISSIONS (1000 TONS) 1900-1945 RHODE ISLAND

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | | | |
| ELECTRIC UTILITIES | .8 | 1.3 | 1.7 | 2.3 | 2.7 | 2.9 | 2.5 | 1.6 | 2.2 | 2.6 |
| INDUSTRIAL BOILERS | 5.5 | 7.0 | 7.9 | 8.5 | 8.2 | 8.2 | 6.6 | 5.1 | 5.3 | 5.8 |
| COMMERCIAL-RESIDENTIAL | .2 | .3 | .4 | .4 | .4 | .5 | .5 | .5 | .5 | .7 |
| ANTHRACITE COAL | | | | | | | | | | |
| ALL USES | 10.6 | 14.4 | 15.5 | 16.2 | 16.4 | 12.2 | 4.3 | 3.2 | 5.3 | 5.7 |
| RESIDUAL OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | 2.9 | 2.3 | 2.1 | 2.3 | 1.4 |
| INDUSTRIAL | NA | NA | NA | NA | NA | 3.6 | 3.5 | 3.5 | 3.5 | 2.2 |
| COMMERCIAL | NA | NA | NA | NA | NA | .0 | .0 | .0 | .1 | .1 |
| DISTILLATE OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .0 | .0 | .0 | .1 | .0 |
| INDUSTRIAL | NA | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .2 |
| COMMERCIAL-RESIDENTIAL | NA | NA | NA | NA | NA | .3 | .5 | .8 | 1.0 | .9 |
| NATURAL GAS | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| WOOD | | | | | | | | | | |
| ALL USES | .2 | .2 | .2 | .2 | .2 | .2 | .2 | .2 | .2 | .1 |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE | .0 | .0 | .1 | .3 | 1.2 | 2.6 | 5.4 | 6.6 | 8.1 | 6.1 |
| DIESEL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL | 1.4 | 1.8 | 2.0 | 2.0 | 2.1 | 1.7 | 1.5 | 1.2 | 1.3 | 2.0 |
| -OIL | NA | NA | NA | NA | NA | .2 | .2 | .2 | .1 | .2 |
| COKE PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS FUEL OIL | NA | NA | NA | NA | NA | 1.9 | 2.3 | 1.8 | 1.8 | .2 |
| CEMENT PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| WILD FIRES | .3 | .3 | .3 | .3 | .3 | .3 | .8 | .1 | .1 | .1 |
| MISCELLANEOUS | 2.2 | 2.5 | 2.8 | 2.8 | 2.8 | 3.2 | 3.5 | 3.1 | 2.8 | 4.1 |

TABLE 6. NOX EMISSIONS (1000 TONS) 1950-1980 RHODE ISLAND

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | |
| ELECTRIC UTILITIES | 2.8 | 6.3 | 6.6 | 4.6 | .0 | .0 | .0 | .0 |
| INDUSTRIAL BOILERS | .0 | 3.9 | 5.8 | .2 | .0 | .0 | .0 | .0 |
| COMMERCIAL-RESIDENTIAL | .3 | .2 | .5 | .0 | .0 | .0 | .0 | .0 |
| ANTHRACITE COAL | | | | | | | | |
| ALL USES | 2.0 | .9 | .1 | .0 | .0 | .0 | .0 | .0 |
| RESIDUAL OIL | | | | | | | | |
| ELECTRIC UTILITIES | 3.4 | 1.8 | .7 | 1.2 | 3.6 | 2.0 | 1.6 | 1.6 |
| INDUSTRIAL | 4.9 | 4.7 | 3.0 | 1.7 | 2.1 | 1.1 | 1.0 | .7 |
| COMMERCIAL | .5 | 1.6 | 1.4 | .6 | 2.6 | 1.0 | 1.0 | .1 |
| DISTILLATE OIL | | | | | | | | |
| ELECTRIC UTILITIES | .4 | .0 | .1 | .1 | .1 | .0 | .0 | .1 |
| INDUSTRIAL | .1 | .1 | .2 | .1 | .1 | .1 | .1 | .2 |
| COMMERCIAL-RESIDENTIAL | 1.3 | 1.1 | 3.1 | 2.8 | 3.2 | 2.8 | 2.8 | 1.6 |
| NATURAL GAS | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .1 | .1 | .6 | .4 | .0 | .4 |
| INDUSTRIAL | .0 | .2 | .9 | 1.5 | .4 | .4 | .3 | .4 |
| PIPELINES | .0 | .1 | .3 | .1 | .0 | .0 | .0 | .2 |
| COMMERCIAL-RESIDENTIAL | .0 | .2 | .4 | .6 | .9 | .9 | .9 | 4.3 |
| WOOD | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | .1 | .1 | .1 | .2 | .3 | .2 | .3 | .4 |
| COMMERCIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDENTIAL | .1 | .1 | .1 | .1 | .1 | .1 | .1 | .2 |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE | 7.9 | 10.8 | 11.5 | 13.0 | 21.2 | 25.7 | 24.6 | 20.1 |
| DIESEL | .2 | .4 | .9 | .9 | 3.8 | 2.9 | 3.1 | 3.9 |
| OTHER | | | | | | | | |
| RAILROADS-COAL | .8 | .2 | .0 | .0 | .0 | .0 | .0 | .0 |
| -OIL | .4 | .5 | .5 | .4 | .5 | .5 | .2 | .0 |
| COKE PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS-DISTILLATE | .1 | .0 | .1 | .0 | .1 | .1 | .1 | .1 |
| -RESIDUAL | .2 | .1 | .1 | .0 | .2 | NA | .0 | .1 |
| OFF HIGHWAY DIESEL | .1 | .3 | .1 | .6 | 1.3 | .6 | .5 | .3 |
| CEMENT PLANT | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| WILD FIRES | .1 | .0 | .0 | .0 | .0 | .0 | .0 | .2 |
| MISCELLANEOUS | 5.7 | 4.7 | 3.9 | 4.4 | 4.6 | 2.2 | 1.7 | 1.4 |

TABLE 5. NOX EMISSIONS (1000 TONS) 1900-1945 SOUTH CAROLINA

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | | | |
| ELECTRIC UTILITIES | .6 | .9 | 1.3 | 1.7 | 2.4 | 3.7 | 3.9 | 2.6 | 3.9 | 5.3 |
| INDUSTRIAL BOILERS | 1.1 | 1.8 | 2.7 | 3.7 | 5.4 | 7.8 | 9.1 | 9.8 | 13.6 | 18.6 |
| COMMERCIAL-RESIDENTIAL | .3 | .6 | .9 | 1.4 | 1.5 | 1.7 | 1.9 | 1.5 | 1.6 | 2.3 |
| ANTHRACITE COAL | | | | | | | | | | |
| ALL USES | .3 | .5 | .5 | .5 | .5 | .4 | NA | NA | NA | NA |
| RESIDUAL OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .1 | .1 | .0 | .0 | .1 |
| INDUSTRIAL | NA | NA | NA | NA | NA | .3 | .3 | .3 | .6 | .7 |
| COMMERCIAL | NA | NA | NA | NA | NA | .0 | .0 | .0 | .1 | .0 |
| DISTILLATE OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .0 | .0 | .0 | .1 | .1 |
| INDUSTRIAL | NA | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .0 |
| COMMERCIAL-RESIDENTIAL | NA | NA | NA | NA | NA | .0 | .0 | .0 | .1 | .2 |
| NATURAL GAS | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| WOOD | | | | | | | | | | |
| ALL USES | 4.0 | 3.8 | 3.6 | 3.5 | 3.3 | 3.2 | 3.0 | 2.9 | 2.8 | 2.6 |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE | .0 | .0 | .1 | .7 | 2.3 | 4.9 | 7.0 | 8.5 | 13.6 | 13.1 |
| DIESEL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL | 1.9 | 3.3 | 4.8 | 6.2 | 7.5 | 6.6 | 6.0 | 4.9 | 5.7 | 8.6 |
| -OIL | NA | NA | NA | NA | NA | .1 | .0 | .0 | .1 | 2.1 |
| COKE PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS FUEL OIL | NA | NA | NA | NA | NA | .8 | 1.0 | .8 | 1.1 | .4 |
| CEMENT PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| WILD FIRES | 6.6 | 6.6 | 6.6 | 6.6 | 6.6 | 6.6 | 89.9 | 9.3 | 20.4 | 12.8 |
| MISCELLANEOUS | 7.2 | 7.7 | 8.2 | 8.2 | 8.3 | 9.0 | 9.5 | 9.0 | 8.4 | 12.1 |

TABLE 6. NOX EMISSIONS (1000 TONS) 1950-1980 SOUTH CAROLINA

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | |
| ELECTRIC UTILITIES | 6.2 | 11.5 | 18.4 | 30.9 | 47.8 | 51.7 | 72.1 | 85.2 |
| INDUSTRIAL BOILERS | 11.6 | 10.8 | 16.0 | 13.4 | 16.1 | 9.4 | 13.1 | 17.4 |
| COMMERCIAL-RESIDENTIAL | 1.8 | 1.1 | 1.7 | 1.1 | 1.4 | .8 | .1 | 1.0 |
| ANTHRACITE COAL | | | | | | | | |
| ALL USES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .1 |
| RESIDUAL OIL | | | | | | | | |
| ELECTRIC UTILITIES | .8 | .1 | .0 | .0 | 2.4 | 5.2 | 6.3 | 2.4 |
| INDUSTRIAL | 2.7 | 3.5 | 2.9 | 2.0 | 1.5 | 2.7 | 8.4 | 4.9 |
| COMMERCIAL | .1 | .2 | .3 | .2 | .3 | .1 | .2 | .0 |
| DISTILLATE OIL | | | | | | | | |
| ELECTRIC UTILITIES | .2 | .0 | .0 | .0 | 1.4 | .1 | 1.7 | 1.2 |
| INDUSTRIAL | .1 | .2 | .2 | .2 | .4 | .6 | .7 | .5 |
| COMMERCIAL-RESIDENTIAL | .9 | 1.6 | 2.7 | 2.0 | 2.7 | 1.5 | 1.8 | 1.4 |
| NATURAL GAS | | | | | | | | |
| ELECTRIC UTILITIES | .0 | 3.8 | 5.7 | 5.1 | 11.0 | 3.6 | 1.3 | 1.3 |
| INDUSTRIAL | .0 | 6.8 | 8.1 | 14.9 | 5.5 | 4.9 | 3.8 | 6.4 |
| PIPELINES | .0 | 1.3 | 1.5 | 2.9 | 4.1 | 3.3 | 4.9 | 3.8 |
| COMMERCIAL-RESIDENTIAL | .0 | .1 | .6 | .9 | 1.6 | 1.8 | 2.6 | 5.1 |
| WOOD | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | 1.0 | 1.1 | 1.2 | 1.6 | 2.2 | 2.2 | 2.8 | 2.8 |
| COMMERCIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDENTIAL | 3.3 | 2.6 | 2.1 | 1.4 | .8 | .8 | .8 | .9 |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE | 28.5 | 38.7 | 45.2 | 57.2 | 79.5 | 97.0 | 102.8 | 87.3 |
| DIESEL | .8 | 1.0 | 2.0 | 5.6 | 13.6 | 19.7 | 25.8 | 33.0 |
| OTHER | | | | | | | | |
| RAILROADS-COAL | 4.7 | 1.5 | .3 | .0 | .0 | .0 | .0 | .0 |
| -OIL | 3.8 | 4.6 | 3.5 | 3.6 | 3.5 | 2.6 | 3.6 | 3.6 |
| COKE PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS-DISTILLATE | .1 | .2 | .3 | .1 | .1 | .2 | .3 | .3 |
| -RESIDUAL | .4 | .6 | 1.0 | .5 | 1.7 | .4 | .7 | 1.0 |
| OFF HIGHWAY DIESEL | 1.7 | 2.1 | 4.0 | 2.7 | 4.1 | 4.0 | 3.5 | 2.1 |
| CEMENT PLANT | .2 | .4 | .6 | .7 | 2.5 | 2.6 | 2.5 | 2.3 |
| WILD FIRES | 4.3 | 2.5 | .8 | .7 | 1.2 | .2 | .8 | .0 |
| MISCELLANEOUS | 16.5 | 14.0 | 11.8 | 14.0 | 15.5 | 9.0 | 7.7 | 6.7 |

TABLE 5. NOX EMISSIONS (1000 TONS) 1900-1945 SOUTH DAKOTA

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | | | |
| ELECTRIC UTILITIES | .6 | 1.0 | 1.5 | 1.8 | 1.9 | 1.7 | 1.5 | 1.2 | 2.0 | 3.2 |
| INDUSTRIAL BOILERS | 1.2 | 1.7 | 2.1 | 2.5 | 2.2 | 1.6 | 1.3 | 1.4 | 2.0 | 2.7 |
| COMMERCIAL-RESIDENTIAL | .7 | 1.0 | 1.3 | 1.7 | 1.8 | 2.1 | 2.2 | 1.7 | 1.7 | 2.2 |
| ANTHRACITE COAL | | | | | | | | | | |
| ALL USES | 1.0 | 1.3 | 1.4 | 1.5 | 1.5 | 1.1 | NA | NA | NA | NA |
| RESIDUAL OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .1 | .1 | .1 | .1 | .1 |
| INDUSTRIAL | NA | NA | NA | NA | NA | .0 | .0 | .0 | NA | .0 |
| COMMERCIAL | NA | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .0 |
| DISTILLATE OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .1 | .1 | .1 | .1 | .2 |
| INDUSTRIAL | NA | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .0 |
| COMMERCIAL-RESIDENTIAL | NA | NA | NA | NA | NA | .0 | .0 | .0 | .1 | .1 |
| NATURAL GAS | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | NA | NA | .2 | .3 | .5 |
| INDUSTRIAL | NA | NA | .0 | NA | .0 | NA | 1.0 | .9 | 1.3 | NA |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | .0 | .0 | .0 | .0 | .1 | .1 | .1 | NA |
| WOOD | | | | | | | | | | |
| ALL USES | .2 | .2 | .1 | .1 | .1 | .1 | .1 | .1 | .1 | .1 |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE | .0 | .0 | .1 | .5 | 1.8 | 4.0 | 5.4 | 6.3 | 7.1 | 6.3 |
| DIESEL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL | 2.7 | 3.9 | 4.8 | 5.3 | 5.7 | 4.6 | 3.8 | 2.9 | 3.0 | 4.1 |
| -OIL | NA | NA | NA | NA | NA | .5 | .5 | .4 | .9 | 1.5 |
| COKE PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS FUEL OIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CEMENT PLANTS | .0 | NA | .0 | .0 | .0 | NA | NA | NA | NA | NA |
| WILD FIRES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .1 | .5 | 2.8 |
| MISCELLANEOUS | 2.0 | 2.5 | 3.0 | 3.0 | 3.0 | 3.3 | 3.5 | 3.3 | 3.0 | 3.9 |

TABLE 6. NOX EMISSIONS (1000 TONS) 1950-1980 SOUTH DAKOTA

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | |
| ELECTRIC UTILITIES | 3.2 | 3.0 | 2.8 | 2.7 | 14.0 | 24.5 | 36.0 | 32.1 |
| INDUSTRIAL BOILERS | .9 | .9 | 1.1 | 2.6 | .4 | .5 | 1.7 | 1.2 |
| COMMERCIAL-RESIDENTIAL | .5 | .3 | .7 | .5 | .1 | .1 | .0 | .1 |
| ANTHRACITE COAL | | | | | | | | |
| ALL USES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDUAL OIL | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .3 | .1 | .1 | .0 |
| INDUSTRIAL | .1 | .1 | .0 | .0 | .0 | .1 | .1 | .1 |
| COMMERCIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| DISTILLATE OIL | | | | | | | | |
| ELECTRIC UTILITIES | .4 | .2 | .1 | .0 | .1 | .2 | .2 | .2 |
| INDUSTRIAL | .0 | .2 | .0 | .0 | .1 | .0 | .1 | .1 |
| COMMERCIAL-RESIDENTIAL | .3 | .3 | 1.2 | 1.2 | 1.1 | .8 | .5 | .5 |
| NATURAL GAS | | | | | | | | |
| ELECTRIC UTILITIES | .4 | .9 | 1.1 | .5 | 1.1 | .8 | .0 | .1 |
| INDUSTRIAL | .8 | 1.8 | 1.8 | 1.7 | .5 | .4 | .5 | .3 |
| PIPELINES | .0 | .0 | .1 | .0 | .0 | .0 | .0 | .1 |
| COMMERCIAL-RESIDENTIAL | .3 | .4 | .7 | .9 | 1.3 | 1.2 | 1.4 | 2.1 |
| WOOD | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | .0 | .0 | .0 | .0 | .0 | .1 | .1 | .1 |
| COMMERCIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDENTIAL | .2 | .1 | .1 | .1 | .1 | .1 | .1 | .1 |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE | 13.9 | 14.5 | 16.9 | 19.6 | 22.8 | 24.1 | 24.9 | 24.0 |
| DIESEL | .6 | 1.0 | .7 | 2.1 | 6.5 | 6.1 | 8.8 | 10.5 |
| OTHER | | | | | | | | |
| RAILROADS-COAL | 2.3 | .7 | .2 | .1 | .0 | .0 | .0 | .0 |
| -OIL | 2.3 | 4.1 | 1.7 | 2.4 | 1.7 | 2.0 | 1.8 | 1.7 |
| COKE PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS-DISTILLATE | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -RESIDUAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| OFF HIGHWAY DIESEL | .6 | 1.3 | 3.4 | 4.5 | 2.8 | 1.9 | 4.3 | 1.0 |
| CEMENT PLANT | .3 | .4 | .5 | .5 | .7 | .7 | .7 | .6 |
| WILD FIRES | .2 | .0 | 1.3 | .2 | 1.5 | 2.2 | 3.2 | 1.5 |
| MISCELLANEOUS | 4.7 | 4.3 | 3.9 | 3.5 | 3.2 | 1.9 | 1.6 | 1.5 |

TABLE 5. NOX EMISSIONS (1000 TONS) 1900-1945 TENNESSEE

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | | | |
| ELECTRIC UTILITIES | 1.3 | 2.1 | 2.9 | 3.9 | 4.5 | 5.0 | 7.3 | 8.4 | 18.2 | 33.7 |
| INDUSTRIAL BOILERS | 9.0 | 11.9 | 14.3 | 16.4 | 18.4 | 21.8 | 22.4 | 22.4 | 29.7 | 39.2 |
| COMMERCIAL-RESIDENTIAL | 1.7 | 2.3 | 2.9 | 3.7 | 3.8 | 4.4 | 4.9 | 4.3 | 4.9 | 7.3 |
| ANTHRACITE COAL | | | | | | | | | | |
| ALL USES | .0 | .1 | .1 | .1 | .1 | .1 | NA | NA | NA | NA |
| RESIDUAL OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .0 | .0 | .0 | .1 | .1 |
| INDUSTRIAL | NA | NA | NA | NA | NA | .1 | .1 | .1 | .1 | .3 |
| COMMERCIAL | NA | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .1 |
| DISTILLATE OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .1 | .1 | .1 | .0 | .1 |
| INDUSTRIAL | NA | NA | NA | NA | NA | .1 | .1 | .1 | .1 | .2 |
| COMMERCIAL-RESIDENTIAL | NA | NA | NA | NA | NA | .0 | .0 | .1 | .1 | .3 |
| NATURAL GAS | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | .2 | .4 | .9 | .8 | 1.1 | 1.1 |
| INDUSTRIAL | NA | NA | NA | .2 | .0 | .0 | .7 | 2.2 | 3.0 | 5.9 |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | .0 | .0 | .0 | .0 | .1 | .2 | .3 | .5 |
| WOOD | | | | | | | | | | |
| ALL USES | 4.8 | 4.6 | 4.4 | 4.2 | 4.0 | 3.8 | 3.6 | 3.5 | 3.4 | 3.1 |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE | .0 | .0 | .2 | 1.0 | 3.3 | 7.2 | 12.6 | 18.3 | 18.5 | 20.3 |
| DIESEL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL | 6.5 | 8.9 | 10.6 | 11.1 | 12.4 | 10.9 | 9.9 | 8.2 | 9.4 | 14.2 |
| -OIL | NA | NA | NA | NA | NA | .9 | .8 | .7 | 1.8 | 4.7 |
| COKE PLANTS | .1 | .1 | .1 | .1 | .1 | .1 | .0 | .0 | .0 | .0 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS FUEL OIL | NA | NA | NA | NA | NA | .4 | .4 | .3 | 1.9 | 4.8 |
| CEMENT PLANTS | .0 | .0 | NA | NA | NA | NA | NA | NA | NA | NA |
| WILD FIRES | 5.8 | 5.8 | 5.8 | 5.8 | 5.8 | 5.8 | 15.5 | 7.5 | 18.6 | 9.5 |
| MISCELLANEOUS | 12.7 | 13.3 | 14.0 | 14.3 | 14.5 | 16.0 | 17.2 | 16.3 | 15.3 | 22.5 |

TABLE 6. NOX EMISSIONS (1000 TONS) 1950-1980 TENNESSEE

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | |
| ELECTRIC UTILITIES | 5.3 | 66.9 | 139.6 | 122.3 | 178.3 | 283.6 | 220.0 | 267.9 |
| INDUSTRIAL BOILERS | 24.3 | 22.7 | 15.5 | 29.8 | 19.0 | 15.1 | 40.9 | 24.8 |
| COMMERCIAL-RESIDENTIAL | 6.1 | 3.9 | 4.7 | 3.3 | 3.2 | 1.1 | .3 | 1.1 |
| ANTHRACITE COAL | | | | | | | | |
| ALL USES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDUAL OIL | | | | | | | | |
| ELECTRIC UTILITIES | .1 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | .3 | .3 | .2 | .2 | .7 | .4 | 1.8 | 1.6 |
| COMMERCIAL | .2 | .1 | .0 | .0 | .0 | .2 | .6 | .0 |
| DISTILLATE OIL | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | 3.2 | 8.9 | .7 |
| INDUSTRIAL | .3 | .2 | .4 | .4 | .5 | 1.1 | 1.8 | 1.6 |
| COMMERCIAL-RESIDENTIAL | .7 | 1.0 | .8 | 1.0 | 2.1 | 1.9 | 2.2 | .8 |
| NATURAL GAS | | | | | | | | |
| ELECTRIC UTILITIES | 1.5 | .5 | 1.8 | 4.5 | 4.2 | .0 | .0 | .3 |
| INDUSTRIAL | 16.7 | 25.0 | 29.5 | 31.5 | 8.5 | 7.8 | 6.9 | 8.6 |
| PIPELINES | 8.2 | 9.6 | 6.7 | 28.4 | 33.1 | 23.9 | 18.0 | 20.6 |
| COMMERCIAL-RESIDENTIAL | .9 | 1.9 | 2.9 | 3.3 | 4.5 | 4.3 | 3.5 | 8.7 |
| WOOD | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | 1.1 | 1.3 | 1.4 | 1.9 | 2.6 | 2.6 | 3.2 | 3.5 |
| COMMERCIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDENTIAL | 4.1 | 2.6 | 2.1 | 1.5 | 1.3 | 1.4 | 2.1 | 2.8 |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE | 40.6 | 54.6 | 66.6 | 83.7 | 98.7 | 153.2 | 159.4 | 127.0 |
| DIESEL | 1.3 | 1.5 | 4.0 | 8.6 | 26.1 | 36.0 | 55.5 | 55.8 |
| OTHER | | | | | | | | |
| RAILROADS-COAL | 7.8 | 2.4 | .5 | .0 | .0 | .0 | .0 | .0 |
| -OIL | 11.1 | 13.7 | 14.6 | 16.4 | 16.7 | 17.3 | 25.2 | 23.7 |
| COKE PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS-DISTILLATE | .2 | .2 | .6 | 1.7 | 2.2 | 3.6 | 3.0 | 1.9 |
| -RESIDUAL | .6 | .5 | .0 | .0 | .0 | .0 | .0 | .0 |
| OFF HIGHWAY DIESEL | 2.2 | 3.1 | 8.1 | 10.5 | 8.4 | 12.9 | 14.5 | 4.8 |
| CEMENT PLANT | 1.6 | 2.0 | 1.9 | 2.2 | 2.1 | 1.6 | 2.0 | 1.7 |
| WILD FIRES | 9.4 | 1.3 | .9 | .5 | .6 | .4 | .8 | 1.1 |
| MISCELLANEOUS | 31.3 | 28.7 | 26.6 | 31.9 | 36.0 | 25.6 | 24.6 | 21.9 |

TABLE 5. NOX EMISSIONS (1000 TONS) 1900-1945 TEXAS

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | | | |
| ELECTRIC UTILITIES | .8 | 1.3 | 1.8 | 2.4 | 3.3 | 4.6 | 4.3 | 2.5 | 3.1 | 3.3 |
| INDUSTRIAL BOILERS | 3.9 | 5.0 | 5.7 | 6.1 | 5.3 | 4.1 | 3.0 | 2.5 | 2.8 | 3.3 |
| COMMERCIAL-RESIDENTIAL | 1.6 | 2.1 | 2.6 | 3.1 | 3.1 | 3.5 | 3.6 | 2.5 | 2.3 | 2.7 |
| ANTHRACITE COAL | | | | | | | | | | |
| ALL USES | .1 | .2 | .2 | .2 | .2 | .1 | NA | NA | NA | NA |
| RESIDUAL OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .6 | .5 | .4 | .3 | .4 |
| INDUSTRIAL | NA | NA | NA | NA | NA | 11.5 | 10.9 | 10.8 | 11.7 | 11.3 |
| COMMERCIAL | NA | NA | NA | NA | NA | .1 | .2 | .4 | 1.2 | 13.4 |
| DISTILLATE OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .1 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | NA | NA | NA | NA | NA | .1 | .1 | .1 | .1 | .5 |
| COMMERCIAL-RESIDENTIAL | NA | NA | NA | NA | NA | .1 | .1 | .2 | .3 | 6.3 |
| NATURAL GAS | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | 2.0 | 4.1 | 10.8 | 8.6 | 12.6 | 25.5 |
| INDUSTRIAL | NA | NA | NA | 5.0 | 23.7 | 75.4 | 261.2 | 264.0 | 368.3 | 519.3 |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | NA | .2 | .5 | .8 | 2.1 | 1.5 | 2.7 | 3.8 |
| WOOD | | | | | | | | | | |
| ALL USES | 3.0 | 2.9 | 2.8 | 2.6 | 2.5 | 2.4 | 2.3 | 2.2 | 2.1 | 2.0 |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE | .0 | .1 | .7 | 3.6 | 12.7 | 27.2 | 46.2 | 52.4 | 74.2 | 72.3 |
| DIESEL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL | 13.4 | 15.0 | 16.9 | 16.8 | 17.3 | 13.9 | 11.6 | 8.8 | 9.2 | 12.5 |
| -OIL | NA | NA | NA | NA | NA | 162.2 | 152.5 | 125.0 | 117.6 | 241.7 |
| COKE PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .1 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS FUEL OIL | NA | NA | NA | NA | NA | 125.3 | 148.7 | 117.8 | 107.0 | 150.5 |
| CEMENT PLANTS | .0 | NA | NA | .5 | .6 | 1.2 | 1.7 | .9 | 1.8 | 2.0 |
| WILD FIRES | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 35.0 | 9.3 | 16.6 | 11.8 |
| MISCELLANEOUS | 27.8 | 31.1 | 34.8 | 36.1 | 37.1 | 44.1 | 49.6 | 45.7 | 41.2 | 64.2 |

TABLE 6. NOX EMISSIONS (1000 TONS) 1950-1980 TEXAS

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | 63.5 | 186.7 | 333.5 |
| INDUSTRIAL BOILERS | .0 | 5.1 | 6.2 | 2.3 | .1 | 11.9 | 8.7 | 12.3 |
| COMMERCIAL-RESIDENTIAL | .5 | .3 | .2 | .1 | .0 | .0 | .0 | .0 |
| ANTHRACITE COAL | | | | | | | | |
| ALL USES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDUAL OIL | | | | | | | | |
| ELECTRIC UTILITIES | .1 | .0 | .0 | .0 | .3 | 3.9 | 4.5 | 1.0 |
| INDUSTRIAL | 4.8 | 6.1 | 4.5 | 1.6 | 2.0 | 8.2 | 18.5 | 17.8 |
| COMMERCIAL | 1.3 | 2.0 | .2 | .0 | .5 | 3.4 | 3.2 | .0 |
| DISTILLATE OIL | | | | | | | | |
| ELECTRIC UTILITIES | .3 | .1 | .1 | .1 | .1 | 3.3 | 4.0 | 3.5 |
| INDUSTRIAL | 2.1 | 2.2 | 2.8 | 2.5 | 2.6 | 4.2 | 8.4 | 6.6 |
| COMMERCIAL-RESIDENTIAL | 1.9 | 3.3 | 1.1 | .8 | 5.0 | 6.5 | 8.5 | 5.1 |
| NATURAL GAS | | | | | | | | |
| ELECTRIC UTILITIES | 40.5 | 67.0 | 99.8 | 159.3 | 259.7 | 331.6 | 365.2 | 350.4 |
| INDUSTRIAL | 642.6 | 707.0 | 688.4 | 646.3 | 125.3 | 97.8 | 101.1 | 113.8 |
| PIPELINES | 23.3 | 52.1 | 627.3 | 810.1 | 1082.2 | 1056.5 | 1041.3 | 802.0 |
| COMMERCIAL-RESIDENTIAL | 6.0 | 8.9 | 11.6 | 13.2 | 18.9 | 17.5 | 22.2 | 40.3 |
| WOOD | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | 1.3 | 1.6 | 1.7 | 2.2 | 3.1 | 3.3 | 4.7 | 4.7 |
| COMMERCIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDENTIAL | 1.8 | 1.4 | 1.1 | .8 | .5 | .6 | .7 | .8 |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE | 142.0 | 182.9 | 208.8 | 261.5 | 321.4 | 382.6 | 451.8 | 415.0 |
| DIESEL | 11.5 | 12.1 | 18.1 | 31.6 | 67.2 | 105.2 | 155.1 | 173.2 |
| OTHER | | | | | | | | |
| RAILROADS-COAL | 6.8 | 2.2 | .5 | .2 | .1 | .0 | .0 | .0 |
| -OIL | 152.1 | 60.3 | 61.5 | 51.7 | 57.7 | 93.3 | 86.1 | 60.8 |
| COKE PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS-DISTILLATE | 4.2 | 5.4 | 4.1 | 2.0 | 4.6 | 8.1 | 11.7 | 11.2 |
| -RESIDUAL | 29.9 | 32.1 | 19.9 | 13.9 | 14.1 | 29.4 | 46.9 | 56.1 |
| OFF HIGHWAY DIESEL | 7.3 | 9.7 | 31.9 | 33.6 | 24.6 | 34.6 | 49.5 | 35.1 |
| CEMENT PLANT | 4.2 | 5.9 | 5.7 | 7.5 | 8.5 | 9.2 | 11.2 | 11.9 |
| WILD FIRES | 7.1 | .7 | 2.2 | .4 | .4 | .3 | 35.6 | .8 |
| MISCELLANEOUS | 94.2 | 93.0 | 93.1 | 119.7 | 140.7 | 106.1 | 104.8 | 93.1 |

TABLE 5. NOX EMISSIONS (1000 TONS) 1900-1945 UTAH

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .1 | .1 | .1 | .1 | .2 | .3 | .3 | .7 | 1.2 |
| INDUSTRIAL BOILERS | 2.1 | 3.1 | 4.2 | 5.3 | 6.2 | 7.2 | 6.5 | 5.5 | 6.4 | 7.6 |
| COMMERCIAL-RESIDENTIAL | .8 | 1.2 | 1.7 | 2.4 | 2.6 | 2.9 | 3.1 | 2.3 | 2.3 | 2.9 |
| ANTHRACITE COAL | | | | | | | | | | |
| ALL USES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDUAL OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .0 | .0 | .0 | .0 | NA |
| INDUSTRIAL | NA | NA | NA | NA | NA | .2 | .2 | .2 | .2 | .2 |
| COMMERCIAL | NA | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .0 |
| DISTILLATE OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .1 |
| INDUSTRIAL | NA | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .0 |
| COMMERCIAL-RESIDENTIAL | NA | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .1 |
| NATURAL GAS | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | NA | NA | NA | NA | .0 |
| INDUSTRIAL | NA | NA | .0 | .0 | .0 | .0 | 1.8 | 4.4 | 6.2 | 8.5 |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | .0 | .0 | .0 | .0 | .1 | .1 | .2 | .5 |
| WOOD | | | | | | | | | | |
| ALL USES | .2 | .2 | .2 | .2 | .2 | .2 | .2 | .2 | .2 | .2 |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE | .0 | .0 | .0 | .2 | .6 | 1.3 | 2.4 | 2.8 | 4.2 | 4.3 |
| DIESEL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL | 1.7 | 2.6 | 3.5 | 4.1 | 4.6 | 3.7 | 3.1 | 2.3 | 2.4 | 3.3 |
| -OIL | NA | NA | NA | NA | NA | 2.6 | 2.4 | 2.0 | 2.2 | 4.6 |
| COKE PLANTS | .0 | .0 | .1 | .1 | .1 | .1 | .1 | .1 | .2 | .2 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS FUEL OIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CEMENT PLANTS | .0 | NA | .2 | .2 | .3 | NA | NA | NA | NA | NA |
| WILD FIRES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .2 | .0 |
| MISCELLANEOUS | 2.5 | 2.9 | 3.2 | 3.3 | 3.4 | 4.0 | 4.4 | 4.1 | 3.8 | 5.8 |

TABLE 6. NOX EMISSIONS (1000 TONS) 1950-1980 UTAH

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | |
| ELECTRIC UTILITIES | 1.6 | 4.3 | 5.9 | 4.2 | 5.3 | 23.0 | 33.3 | 60.1 |
| INDUSTRIAL BOILERS | 15.7 | 14.6 | 3.6 | 1.5 | 4.6 | 4.4 | 7.6 | 4.1 |
| COMMERCIAL-RESIDENTIAL | 1.5 | .9 | 1.2 | .9 | .6 | .4 | .4 | 1.2 |
| ANTHRACITE COAL | | | | | | | | |
| ALL USES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDUAL OIL | | | | | | | | |
| ELECTRIC UTILITIES | .0 | 1.1 | 2.7 | 1.9 | 2.1 | .1 | .1 | .0 |
| INDUSTRIAL | 3.3 | 3.1 | 2.9 | 3.7 | 2.5 | 4.2 | 3.7 | 2.7 |
| COMMERCIAL | .0 | .0 | .3 | .3 | .4 | .5 | .6 | .6 |
| DISTILLATE OIL | | | | | | | | |
| ELECTRIC UTILITIES | .1 | .2 | .2 | .0 | .0 | .0 | .1 | .1 |
| INDUSTRIAL | .1 | .1 | .1 | .2 | .3 | 1.1 | 1.4 | .6 |
| COMMERCIAL-RESIDENTIAL | .1 | .3 | .3 | .5 | .5 | 1.0 | .8 | .5 |
| NATURAL GAS | | | | | | | | |
| ELECTRIC UTILITIES | .3 | 2.4 | .9 | 1.0 | .9 | .7 | 1.9 | 1.3 |
| INDUSTRIAL | 5.9 | 10.3 | 12.9 | 22.0 | 4.4 | 3.4 | 3.2 | 3.0 |
| PIPELINES | .0 | .0 | .1 | .5 | 1.4 | 9.4 | 11.6 | 10.6 |
| COMMERCIAL-RESIDENTIAL | .6 | 1.0 | 1.6 | 2.3 | 2.7 | 3.3 | 2.8 | 7.9 |
| WOOD | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | .0 | .0 | .0 | .0 | .0 | .1 | .1 | .1 |
| COMMERCIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDENTIAL | .2 | .2 | .1 | .1 | .1 | .2 | .2 | .3 |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE | 8.3 | 10.3 | 13.4 | 16.6 | 21.6 | 28.3 | 32.4 | 32.4 |
| DIESEL | 2.4 | 2.7 | 3.1 | 6.1 | 10.2 | 10.6 | 13.1 | 16.0 |
| OTHER | | | | | | | | |
| RAILROADS-COAL | 1.8 | .6 | .1 | .1 | .0 | .0 | .0 | .0 |
| -OIL | 21.3 | 15.6 | 15.4 | 12.9 | 13.4 | 16.6 | 15.3 | 18.1 |
| COKE PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS-DISTILLATE | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -RESIDUAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| OFF HIGHWAY DIESEL | 1.5 | 1.9 | 2.7 | 3.8 | 5.0 | 6.2 | 6.6 | 5.6 |
| CEMENT PLANT | .3 | .4 | .5 | .5 | .5 | .7 | .8 | .7 |
| WILD FIRES | .2 | .0 | .3 | .1 | .1 | 1.0 | .2 | .4 |
| MISCELLANEOUS | 8.4 | 8.3 | 8.2 | 10.8 | 12.8 | 9.6 | 9.4 | 8.4 |

TABLE 5. NOX EMISSIONS (1000 TONS) 1900-1945 VERMONT

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | | | |
| ELECTRIC UTILITIES | .4 | .7 | 1.0 | 1.3 | 1.5 | 1.6 | 1.3 | .8 | 1.1 | 1.4 |
| INDUSTRIAL BOILERS | 2.2 | 3.1 | 3.8 | 4.6 | 4.6 | 4.4 | 3.5 | 2.6 | 2.7 | 2.9 |
| COMMERCIAL-RESIDENTIAL | .1 | .1 | .2 | .2 | .2 | .3 | .3 | .2 | .3 | .4 |
| ANTHRACITE COAL | | | | | | | | | | |
| ALL USES | 10.6 | 14.4 | 15.5 | 16.2 | 16.4 | 12.2 | 4.3 | 3.2 | 5.3 | 5.7 |
| RESIDUAL OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | NA | NA | NA | NA | NA | .0 | .0 | .0 | .1 | .1 |
| COMMERCIAL | NA | NA | NA | NA | NA | .0 | .0 | .0 | NA | NA |
| DISTILLATE OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .1 | .1 | .0 | .0 | .1 |
| INDUSTRIAL | NA | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .0 |
| COMMERCIAL-RESIDENTIAL | NA | NA | NA | NA | NA | .1 | .1 | .2 | .2 | .2 |
| NATURAL GAS | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| WOOD | | | | | | | | | | |
| ALL USES | .7 | .6 | .6 | .6 | .5 | .5 | .5 | .5 | .5 | .4 |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE | .0 | .0 | .0 | .2 | .7 | 1.5 | 2.8 | 3.1 | 4.2 | 3.2 |
| DIESEL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL | .8 | 1.1 | 1.3 | 1.5 | 1.6 | 1.4 | 1.2 | .9 | 1.0 | 1.5 |
| -OIL | NA | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .1 |
| COKE PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS FUEL OIL | NA | NA | NA | NA | NA | .0 | .0 | .0 | .0 | NA |
| CEMENT PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| WILD FIRES | .0 | .0 | .0 | .0 | .0 | .0 | .2 | .0 | .1 | .0 |
| MISCELLANEOUS | 1.7 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 | 2.3 |

TABLE 6. NOX EMISSIONS (1000 TONS) 1950-1980 VERMONT

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .8 | .2 | .5 | .6 | .1 | .0 | .0 |
| INDUSTRIAL BOILERS | .0 | .1 | .2 | .0 | .0 | .0 | .0 | .0 |
| COMMERCIAL-RESIDENTIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .1 |
| ANTHRACITE COAL | | | | | | | | |
| ALL USES | 2.0 | 1.2 | .2 | .1 | .2 | .0 | .0 | .1 |
| RESIDUAL OIL | | | | | | | | |
| ELECTRIC UTILITIES | .1 | .1 | .0 | .1 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | .3 | .2 | .4 | .4 | .6 | .2 | .5 | .3 |
| COMMERCIAL | .0 | .0 | .1 | .3 | .2 | .1 | .4 | .1 |
| DISTILLATE OIL | | | | | | | | |
| ELECTRIC UTILITIES | .1 | .1 | .0 | .0 | .5 | .1 | .0 | .0 |
| INDUSTRIAL | .1 | .1 | .0 | .1 | .1 | .1 | .1 | .1 |
| COMMERCIAL-RESIDENTIAL | .3 | .2 | 1.3 | 1.9 | 2.2 | 1.6 | 1.8 | 1.2 |
| NATURAL GAS | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .2 | .0 | .1 |
| INDUSTRIAL | .0 | .0 | .0 | .0 | .1 | .2 | .2 | .1 |
| PIPELINES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| COMMERCIAL-RESIDENTIAL | .0 | .0 | .0 | .0 | .1 | .1 | .2 | .4 |
| WOOD | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .1 |
| INDUSTRIAL | .2 | .3 | .3 | .3 | .3 | .3 | .5 | .5 |
| COMMERCIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDENTIAL | .5 | .3 | .3 | .2 | .2 | .2 | .4 | .5 |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE | 6.8 | 8.0 | 8.8 | 10.6 | 13.1 | 15.8 | 16.1 | 14.3 |
| DIESEL | .1 | .1 | .3 | .7 | 1.5 | 2.6 | 3.7 | 4.3 |
| OTHER | | | | | | | | |
| RAILROADS-COAL | .7 | .1 | .0 | .0 | .0 | .0 | .0 | .0 |
| -OIL | .3 | .9 | 1.6 | .5 | .5 | .2 | .5 | .4 |
| COKE PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS-DISTILLATE | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -RESIDUAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| OFF HIGHWAY DIESEL | .2 | .2 | .4 | .4 | .5 | .5 | .5 | 1.5 |
| CEMENT PLANT | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| WILD FIRES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| MISCELLANEOUS | 2.7 | 2.4 | 2.0 | 2.1 | 2.2 | 1.2 | 1.0 | .9 |

TABLE 5. NOX EMISSIONS (1000 TONS) 1900-1945 VIRGINIA

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | | | |
| ELECTRIC UTILITIES | 1.9 | 3.2 | 4.3 | 5.8 | 7.1 | 8.8 | 9.2 | 7.3 | 12.5 | 19.5 |
| INDUSTRIAL BOILERS | 8.0 | 12.0 | 16.4 | 21.2 | 22.4 | 22.4 | 22.3 | 23.2 | 31.6 | 42.5 |
| COMMERCIAL-RESIDENTIAL | .8 | 1.3 | 1.8 | 2.6 | 2.9 | 3.3 | 4.2 | 4.3 | 5.5 | 9.1 |
| ANTHRACITE COAL | | | | | | | | | | |
| ALL USES | .9 | 1.2 | 1.3 | 1.4 | 1.4 | 1.1 | .7 | .5 | .9 | 1.1 |
| RESIDUAL OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .3 | .3 | .2 | .1 | .2 |
| INDUSTRIAL | NA | NA | NA | NA | NA | .3 | .3 | .3 | .4 | .4 |
| COMMERCIAL | NA | NA | NA | NA | NA | .1 | .2 | .3 | .4 | .3 |
| DISTILLATE OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .3 | .2 | .2 | .4 | .6 |
| INDUSTRIAL | NA | NA | NA | NA | NA | .1 | .1 | .1 | .1 | .1 |
| COMMERCIAL-RESIDENTIAL | NA | NA | NA | NA | NA | .0 | .1 | .1 | .1 | .3 |
| NATURAL GAS | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | .0 | .0 | .0 | NA | NA | NA |
| INDUSTRIAL | NA | NA | .0 | .0 | .0 | .0 | .0 | NA | NA | NA |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | .0 | .0 | .0 | .0 | .0 | NA | NA | NA |
| WOOD | | | | | | | | | | |
| ALL USES | 5.0 | 4.8 | 4.6 | 4.4 | 4.2 | 4.0 | 3.8 | 3.6 | 3.5 | 3.3 |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE | .0 | .0 | .2 | 1.0 | 3.6 | 7.8 | 13.5 | 16.8 | 24.7 | 23.5 |
| DIESEL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL | 7.0 | 11.1 | 14.9 | 17.9 | 21.0 | 18.5 | 16.7 | 13.8 | 15.9 | 24.0 |
| -OIL | NA | NA | NA | NA | NA | .5 | .5 | .4 | .7 | 2.4 |
| COKE PLANTS | .1 | .1 | .2 | .2 | .2 | .1 | .1 | .0 | .1 | .1 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS FUEL OIL | NA | NA | NA | NA | NA | 13.2 | 15.6 | 12.4 | 13.0 | 38.6 |
| CEMENT PLANTS | .0 | .2 | NA | NA | NA | NA | NA | NA | NA | NA |
| WILD FIRES | 3.9 | 3.9 | 3.9 | 3.9 | 3.9 | 3.9 | 16.8 | 1.2 | .8 | .6 |
| MISCELLANEOUS | 12.5 | 13.3 | 14.2 | 14.5 | 14.8 | 16.2 | 17.3 | 16.6 | 15.8 | 23.6 |

TABLE 6. NOX EMISSIONS (1000 TONS) 1950-1980 VIRGINIA

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | |
| ELECTRIC UTILITIES | 33.0 | 41.0 | 72.0 | 95.0 | 76.5 | 45.9 | 54.2 | 63.6 |
| INDUSTRIAL BOILERS | 37.2 | 34.8 | 33.3 | 38.2 | 36.4 | 22.4 | 17.7 | 28.3 |
| COMMERCIAL-RESIDENTIAL | 4.8 | 3.0 | 6.4 | 3.9 | 2.8 | 1.1 | .3 | 1.0 |
| ANTHRACITE COAL | | | | | | | | |
| ALL USES | .9 | .5 | .1 | .3 | .1 | .2 | .3 | .1 |
| RESIDUAL OIL | | | | | | | | |
| ELECTRIC UTILITIES | .6 | .1 | .1 | .2 | 20.4 | 30.5 | 30.0 | 17.5 |
| INDUSTRIAL | 1.6 | 1.8 | 3.1 | 3.7 | 2.6 | 7.6 | 7.5 | 5.9 |
| COMMERCIAL | 3.8 | 3.2 | 1.7 | 1.8 | 5.6 | 3.1 | 2.3 | .3 |
| DISTILLATE OIL | | | | | | | | |
| ELECTRIC UTILITIES | .6 | .1 | .2 | .1 | 1.2 | 4.7 | 4.4 | 1.5 |
| INDUSTRIAL | .2 | .3 | .6 | .6 | .8 | 1.6 | 2.1 | 1.4 |
| COMMERCIAL-RESIDENTIAL | .1 | 1.8 | 5.4 | 6.1 | 7.3 | 5.2 | 5.3 | 4.3 |
| NATURAL GAS | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .2 | .4 | .5 | 1.0 | .1 | .2 | .6 |
| INDUSTRIAL | 1.1 | 5.2 | 8.6 | 12.4 | 3.1 | 2.5 | 2.3 | 3.8 |
| PIPELINES | .1 | 2.7 | 4.9 | 8.4 | 9.7 | 3.8 | 3.4 | 10.3 |
| COMMERCIAL-RESIDENTIAL | .5 | 1.1 | 1.9 | 2.6 | 4.0 | 4.1 | 4.9 | 13.6 |
| WOOD | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | 1.4 | 1.7 | 1.8 | 2.2 | 2.6 | 2.4 | 3.2 | 3.2 |
| COMMERCIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDENTIAL | 3.9 | 3.0 | 2.4 | 1.8 | 1.4 | 1.5 | 2.2 | 3.0 |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE | 50.0 | 67.1 | 79.8 | 97.5 | 136.1 | 161.7 | 166.2 | 146.1 |
| DIESEL | 2.3 | 3.1 | 5.8 | 19.7 | 24.8 | 32.0 | 36.5 | 45.9 |
| OTHER | | | | | | | | |
| RAILROADS-COAL | 13.2 | 4.1 | .8 | .0 | .0 | .0 | .0 | .0 |
| -OIL | 9.8 | 13.9 | 12.7 | 18.9 | 24.6 | 16.2 | 18.0 | 20.9 |
| COKE PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS-DISTILLATE | .6 | 1.6 | 1.6 | .8 | .8 | .9 | 1.2 | 1.5 |
| -RESIDUAL | 4.3 | 10.0 | 5.2 | 3.0 | 4.5 | 2.8 | 2.1 | 5.4 |
| OFF HIGHWAY DIESEL | 1.6 | 3.0 | 3.9 | 7.0 | 9.9 | 6.6 | 7.1 | 6.7 |
| CEMENT PLANT | .4 | .9 | 1.2 | 1.5 | .1 | .1 | .1 | .1 |
| WILD FIRES | .4 | .3 | .1 | .3 | .2 | .1 | .2 | .1 |
| MISCELLANEOUS | 33.5 | 30.8 | 28.6 | 37.5 | 44.0 | 30.7 | 29.4 | 25.9 |

TABLE 5. NOX EMISSIONS (1000 TONS) 1900-1945 WASHINGTON

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | | | |
| ELECTRIC UTILITIES | .4 | .7 | 1.0 | 1.3 | 1.2 | .5 | .1 | .0 | .1 | .1 |
| INDUSTRIAL BOILERS | 1.8 | 2.8 | 3.8 | 4.9 | 4.9 | 4.6 | 4.1 | 3.9 | 5.0 | 6.4 |
| COMMERCIAL-RESIDENTIAL | .6 | .9 | 1.3 | 1.9 | 2.0 | 2.3 | 2.4 | 1.8 | 1.7 | 2.2 |
| ANTHRACITE COAL | | | | | | | | | | |
| ALL USES | .0 | .0 | .0 | .0 | .0 | .0 | NA | NA | NA | NA |
| RESIDUAL OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | 1.5 | 1.2 | 1.1 | .7 | 1.1 |
| INDUSTRIAL | NA | NA | NA | NA | NA | 3.1 | 3.0 | 2.9 | 2.5 | 5.6 |
| COMMERCIAL | NA | NA | NA | NA | NA | .1 | .1 | .2 | .2 | .8 |
| DISTILLATE OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .2 | .2 | .1 | .0 | .3 |
| INDUSTRIAL | NA | NA | NA | NA | NA | .0 | .0 | .0 | .1 | .1 |
| COMMERCIAL-RESIDENTIAL | NA | NA | NA | NA | NA | .1 | .1 | .1 | .2 | .6 |
| NATURAL GAS | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | .0 | .0 | .0 | .0 | NA | NA | NA | NA |
| WOOD | | | | | | | | | | |
| ALL USES | 4.4 | 4.2 | 4.0 | 3.9 | 3.7 | 3.5 | 3.3 | 3.2 | 3.1 | 2.9 |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE | .0 | .0 | .2 | 1.2 | 4.4 | 9.4 | 15.0 | 15.9 | 22.0 | 21.9 |
| DIESEL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL | 6.2 | 9.8 | 13.2 | 15.8 | 17.7 | 14.2 | 11.8 | 9.0 | 9.4 | 12.8 |
| -OIL | NA | NA | NA | NA | NA | 21.4 | 20.2 | 16.5 | 8.5 | 15.7 |
| COKE PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS FUEL OIL | NA | NA | NA | NA | NA | 18.4 | 21.8 | 17.3 | 8.9 | 25.1 |
| CEMENT PLANTS | .0 | NA | NA | .4 | .5 | .6 | NA | NA | NA | NA |
| WILD FIRES | .4 | .4 | .4 | .4 | .4 | .4 | .5 | .3 | .1 | .1 |
| MISCELLANEOUS | 4.7 | 6.4 | 8.3 | 8.6 | 8.7 | 10.2 | 11.3 | 10.4 | 9.4 | 15.4 |

TABLE 6. NOX EMISSIONS (1000 TONS) 1950-1980 WASHINGTON

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | 42.8 | 54.7 | 59.1 |
| INDUSTRIAL BOILERS | 3.0 | 2.8 | 3.9 | 3.1 | 2.3 | 3.7 | 5.1 | 3.3 |
| COMMERCIAL-RESIDENTIAL | 1.4 | .9 | 1.1 | .9 | .2 | .1 | .2 | .8 |
| ANTHRACITE COAL | | | | | | | | |
| ALL USES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDUAL OIL | | | | | | | | |
| ELECTRIC UTILITIES | 1.5 | 1.7 | .1 | .0 | .0 | .0 | .0 | .3 |
| INDUSTRIAL | 6.5 | 10.2 | 4.1 | 3.6 | 5.1 | 4.9 | 6.1 | 7.5 |
| COMMERCIAL | .2 | .4 | 1.9 | 2.0 | 2.4 | 1.3 | 1.0 | 1.6 |
| DISTILLATE OIL | | | | | | | | |
| ELECTRIC UTILITIES | .1 | .1 | .0 | .0 | .0 | .1 | .1 | .1 |
| INDUSTRIAL | .3 | .5 | .5 | .6 | 1.1 | 1.6 | 2.3 | 1.1 |
| COMMERCIAL-RESIDENTIAL | .6 | .8 | 5.2 | 4.7 | 5.0 | 3.2 | 3.0 | 2.2 |
| NATURAL GAS | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .2 |
| INDUSTRIAL | .0 | .0 | 16.9 | 25.0 | 6.5 | 6.4 | 4.7 | 4.5 |
| PIPELINES | .0 | .0 | .5 | .9 | 8.0 | 7.3 | 7.9 | 4.6 |
| COMMERCIAL-RESIDENTIAL | .0 | .0 | .7 | 1.4 | 2.5 | 3.3 | 2.6 | 9.4 |
| WOOD | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | 2.2 | 2.6 | 2.8 | 3.8 | 4.0 | 3.8 | 4.7 | 4.0 |
| COMMERCIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDENTIAL | 2.3 | 1.8 | 1.4 | 1.0 | .8 | .8 | 1.2 | 1.6 |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE | 35.9 | 44.5 | 50.3 | 61.6 | 97.3 | 111.1 | 121.2 | 108.6 |
| DIESEL | 4.5 | 3.5 | 4.6 | 6.2 | 16.1 | 18.5 | 30.5 | 33.9 |
| OTHER | | | | | | | | |
| RAILROADS-COAL | 7.0 | 2.3 | .5 | .2 | .1 | .0 | .0 | .0 |
| -OIL | 20.4 | 11.9 | 10.6 | 11.9 | 4.6 | 14.1 | 20.0 | 14.7 |
| COKE PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS-DISTILLATE | .9 | .9 | .8 | .9 | 1.2 | 1.7 | 2.5 | 2.3 |
| -RESIDUAL | 1.9 | 1.8 | 1.9 | 1.5 | 1.8 | 2.4 | 6.9 | 9.7 |
| OFF HIGHWAY DIESEL | 5.7 | 8.2 | 13.1 | 14.3 | 5.4 | 4.5 | 9.5 | 9.2 |
| CEMENT PLANT | 1.2 | 1.4 | 1.5 | 1.5 | 1.6 | 1.8 | 2.4 | 2.0 |
| WILD FIRES | .0 | .0 | .1 | .0 | .5 | .0 | .0 | .0 |
| MISCELLANEOUS | 23.7 | 21.1 | 19.0 | 26.1 | 31.1 | 20.9 | 19.5 | 16.9 |

TABLE 5. NOX EMISSIONS (1000 TONS) 1900-1945 WEST VIRGINIA

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | | | |
| ELECTRIC UTILITIES | 1.6 | 2.6 | 3.6 | 4.8 | 8.8 | 17.2 | 19.7 | 14.2 | 22.5 | 32.7 |
| INDUSTRIAL BOILERS | 10.1 | 16.2 | 23.2 | 31.4 | 33.9 | 34.6 | 30.6 | 27.1 | 32.8 | 40.4 |
| COMMERCIAL-RESIDENTIAL | .4 | .6 | .9 | 1.4 | 1.5 | 1.7 | 1.8 | 1.5 | 1.6 | 2.2 |
| ANTHRACITE COAL | | | | | | | | | | |
| ALL USES | .2 | .3 | .3 | .3 | .3 | .2 | NA | NA | NA | NA |
| RESIDUAL OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .4 | .3 | .3 | .3 | .5 |
| INDUSTRIAL | NA | NA | NA | NA | NA | .8 | .8 | .8 | 1.0 | .8 |
| COMMERCIAL | NA | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .0 |
| DISTILLATE OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | NA | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .1 |
| COMMERCIAL-RESIDENTIAL | NA | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .1 |
| NATURAL GAS | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .0 | .4 |
| INDUSTRIAL | NA | NA | 38.1 | 46.2 | 47.5 | 29.8 | 23.1 | 17.4 | 24.3 | 24.2 |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | .7 | .9 | 1.1 | 1.2 | 1.2 | .7 | 1.3 | 1.5 |
| WOOD | | | | | | | | | | |
| ALL USES | 1.3 | 1.2 | 1.2 | 1.1 | 1.1 | 1.0 | .9 | .9 | .9 | .8 |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE | .0 | .0 | .1 | .6 | 2.2 | 4.7 | 8.3 | 9.6 | 13.4 | 11.7 |
| DIESEL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL | 4.2 | 7.1 | 10.1 | 12.6 | 15.0 | 13.2 | 12.0 | 9.9 | 11.4 | 17.2 |
| -OIL | NA | NA | NA | NA | NA | .1 | .1 | .1 | .6 | .2 |
| COKE PLANTS | .2 | .3 | .5 | .6 | .6 | .5 | .4 | .3 | .5 | .7 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS FUEL OIL | NA | NA | NA | NA | NA | .0 | .0 | .0 | .1 | .6 |
| CEMENT PLANTS | .0 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| WILD FIRES | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 7.9 | .7 | 1.0 | 1.0 |
| MISCELLANEOUS | 4.9 | 5.6 | 6.3 | 6.3 | 6.3 | 7.7 | 8.9 | 7.7 | 6.3 | 9.8 |

TABLE 6. NOX EMISSIONS (1000 TONS) 1950-1980 WEST VIRGINIA

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | |
| ELECTRIC UTILITIES | 45.3 | 73.0 | 67.6 | 92.3 | 164.8 | 302.9 | 296.8 | 350.6 |
| INDUSTRIAL BOILERS | 30.9 | 28.9 | 21.8 | 63.7 | 45.2 | 32.2 | 25.6 | 20.9 |
| COMMERCIAL-RESIDENTIAL | 1.5 | .9 | 1.2 | 1.2 | 1.1 | .5 | .3 | .6 |
| ANTHRACITE COAL | | | | | | | | |
| ALL USES | .0 | .0 | .0 | .0 | .0 | .2 | .1 | .1 |
| RESIDUAL OIL | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .1 | .5 | .0 | .1 | .0 |
| INDUSTRIAL | 1.7 | 1.5 | 1.5 | 2.2 | 1.2 | 1.1 | 2.3 | 1.7 |
| COMMERCIAL | .0 | .0 | .1 | .1 | 5.0 | .3 | .6 | .0 |
| DISTILLATE OIL | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | 1.2 | 2.5 | 1.2 |
| INDUSTRIAL | .1 | .1 | .2 | .3 | .3 | .5 | .6 | 1.4 |
| COMMERCIAL-RESIDENTIAL | .2 | .2 | .2 | .3 | .3 | .5 | .6 | .8 |
| NATURAL GAS | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .3 | .2 | .1 | .2 | .1 | .0 | .0 |
| INDUSTRIAL | 31.9 | 33.2 | 30.3 | 24.2 | 6.3 | 4.6 | 4.2 | 4.0 |
| PIPELINES | 5.2 | 9.2 | 10.5 | 22.5 | 13.1 | 19.8 | 20.6 | 19.6 |
| COMMERCIAL-RESIDENTIAL | 2.2 | 2.8 | 3.3 | 3.2 | 4.0 | 3.8 | 3.8 | 9.8 |
| WOOD | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | .3 | .3 | .3 | .4 | .3 | .4 | .5 | .6 |
| COMMERCIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDENTIAL | 1.1 | .8 | .7 | .5 | .5 | .5 | .8 | 1.3 |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE | 24.4 | 28.8 | 30.5 | 36.0 | 40.4 | 49.8 | 48.7 | 41.3 |
| DIESEL | 1.5 | 1.6 | 3.3 | 3.9 | 14.2 | 10.9 | 11.6 | 17.9 |
| OTHER | | | | | | | | |
| RAILROADS-COAL | 9.4 | 2.9 | .6 | .0 | .0 | .0 | .0 | .0 |
| -OIL | .8 | 4.2 | 8.6 | 5.5 | 7.9 | 8.3 | 12.1 | 13.7 |
| COKE PLANTS | .1 | .1 | .1 | .1 | .1 | .1 | .1 | .1 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS-DISTILLATE | .0 | .1 | .2 | .4 | .1 | .9 | 1.0 | .3 |
| -RESIDUAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| OFF HIGHWAY DIESEL | .0 | .5 | .3 | 1.8 | 2.0 | 2.7 | 7.1 | 8.5 |
| CEMENT PLANT | .4 | .5 | .8 | .9 | .9 | .8 | 1.0 | .9 |
| WILD FIRES | 1.4 | .5 | 1.3 | 2.2 | .7 | .4 | .7 | 1.0 |
| MISCELLANEOUS | 14.6 | 12.2 | 10.0 | 9.3 | 8.9 | 4.8 | 4.0 | 3.5 |

TABLE 5. NOX EMISSIONS (1000 TONS) 1900-1945 WISCONSIN

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | | | |
| ELECTRIC UTILITIES | 2.6 | 4.4 | 6.0 | 8.0 | 9.2 | 10.1 | 10.1 | 8.0 | 13.8 | 21.7 |
| INDUSTRIAL BOILERS | 14.1 | 19.6 | 24.6 | 29.7 | 37.7 | 50.5 | 47.2 | 39.6 | 45.7 | 53.8 |
| COMMERCIAL-RESIDENTIAL | 3.0 | 4.3 | 5.7 | 7.6 | 8.0 | 9.1 | 9.7 | 7.7 | 7.9 | 10.9 |
| ANTHRACITE COAL | | | | | | | | | | |
| ALL USES | 9.3 | 12.6 | 13.6 | 14.3 | 14.4 | 10.8 | 2.3 | 1.7 | 2.9 | 3.9 |
| RESIDUAL OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .4 | .3 | .3 | .3 | .5 |
| INDUSTRIAL | NA | NA | NA | NA | NA | .6 | .6 | .6 | .5 | .7 |
| COMMERCIAL | NA | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .0 |
| DISTILLATE OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .1 | .1 | .1 | .3 | .2 |
| INDUSTRIAL | NA | NA | NA | NA | NA | .1 | .1 | .1 | .2 | .3 |
| COMMERCIAL-RESIDENTIAL | NA | NA | NA | NA | NA | .0 | .0 | .1 | .2 | .2 |
| NATURAL GAS | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| WOOD | | | | | | | | | | |
| ALL USES | 3.4 | 3.2 | 3.1 | 3.0 | 2.8 | 2.7 | 2.6 | 2.5 | 2.4 | 2.2 |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE | .0 | .1 | .4 | 1.9 | 6.7 | 14.5 | 25.7 | 25.2 | 32.8 | 29.8 |
| DIESEL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL | 7.1 | 10.3 | 12.8 | 14.3 | 15.4 | 12.4 | 10.3 | 7.8 | 8.2 | 11.2 |
| -OIL | NA | NA | NA | NA | NA | .4 | .3 | .3 | .5 | 1.9 |
| COKE PLANTS | .1 | .1 | .1 | .1 | .1 | .0 | .0 | .0 | .0 | .0 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS FUEL OIL | NA | NA | NA | NA | NA | NA | NA | NA | .0 | .0 |
| CEMENT PLANTS | .0 | .0 | .0 | .0 | NA | NA | NA | NA | NA | NA |
| WILD FIRES | 7.8 | 7.8 | 7.8 | 7.8 | 7.8 | 7.8 | 11.6 | .0 | .3 | .3 |
| MISCELLANEOUS | 11.4 | 12.1 | 12.9 | 13.0 | 13.1 | 14.9 | 16.4 | 15.0 | 13.4 | 19.6 |

TABLE 6. NOX EMISSIONS (1000 TONS) 1950-1980 WISCONSIN

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | |
| ELECTRIC UTILITIES | 33.6 | 47.1 | 59.7 | 77.0 | 126.3 | 133.4 | 138.7 | 164.9 |
| INDUSTRIAL BOILERS | 18.9 | 17.6 | 37.8 | 50.2 | 42.2 | 17.5 | 19.4 | 19.9 |
| COMMERCIAL-RESIDENTIAL | 3.5 | 2.2 | 13.7 | 10.1 | 7.6 | 1.9 | .4 | .3 |
| ANTHRACITE COAL | | | | | | | | |
| ALL USES | 6.3 | 2.4 | .5 | .2 | .1 | .0 | .0 | .0 |
| RESIDUAL OIL | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .1 | 1.4 | .3 | .1 | .1 |
| INDUSTRIAL | 1.0 | 1.0 | 2.3 | 1.6 | .9 | .6 | 1.1 | 1.6 |
| COMMERCIAL | .0 | .0 | 1.1 | .7 | .5 | .5 | .6 | .0 |
| DISTILLATE OIL | | | | | | | | |
| ELECTRIC UTILITIES | .5 | .2 | .0 | .0 | .2 | 1.1 | 4.0 | 1.0 |
| INDUSTRIAL | .4 | .5 | .0 | .4 | .5 | .4 | .5 | .7 |
| COMMERCIAL-RESIDENTIAL | .8 | 1.0 | 7.7 | 10.1 | 9.0 | 7.8 | 8.6 | 4.0 |
| NATURAL GAS | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .5 | 3.1 | 3.2 | 4.9 | 2.0 | 3.4 |
| INDUSTRIAL | 1.2 | 3.7 | 11.5 | 26.3 | 9.9 | 10.7 | 10.8 | 9.1 |
| PIPELINES | .8 | .5 | .7 | 1.9 | 8.2 | 6.2 | 2.1 | 10.3 |
| COMMERCIAL-RESIDENTIAL | .6 | 1.5 | 2.9 | 5.1 | 8.0 | 9.4 | 10.3 | 27.5 |
| WOOD | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | 1.1 | 1.3 | 1.4 | 1.7 | 1.8 | 2.3 | 3.3 | 3.1 |
| COMMERCIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDENTIAL | 2.5 | 2.0 | 1.6 | 1.2 | 1.0 | 1.0 | 1.5 | 2.1 |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE | 53.4 | 65.5 | 75.0 | 88.0 | 117.2 | 133.0 | 141.5 | 118.6 |
| DIESEL | 2.1 | 2.0 | 2.6 | 7.5 | 22.0 | 27.6 | 42.1 | 44.0 |
| OTHER | | | | | | | | |
| RAILROADS-COAL | 6.1 | 2.0 | .4 | .2 | .1 | .0 | .0 | .0 |
| -OIL | 5.6 | 9.7 | 10.1 | 6.7 | 8.7 | 6.8 | 7.6 | 9.6 |
| COKE PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS-DISTILLATE | .0 | .0 | .1 | .1 | .1 | .1 | .4 | .3 |
| -RESIDUAL | .0 | .2 | .3 | .4 | .0 | .4 | .6 | .2 |
| OFF HIGHWAY DIESEL | 1.2 | 2.5 | 4.0 | 7.8 | 8.9 | 6.3 | 6.0 | 4.5 |
| CEMENT PLANT | .4 | .5 | .6 | .6 | .1 | .1 | .4 | .3 |
| WILD FIRES | .1 | .1 | 1.6 | .1 | .2 | .1 | .1 | .6 |
| MISCELLANEOUS | 27.5 | 24.0 | 20.9 | 24.9 | 27.7 | 16.1 | 13.9 | 11.9 |

TABLE 5. NOX EMISSIONS (1000 TONS) 1900-1945 WYOMING

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | | | |
| ELECTRIC UTILITIES | .5 | .9 | 1.2 | 1.6 | 1.7 | 1.5 | 1.2 | .8 | 1.3 | 1.9 |
| INDUSTRIAL BOILERS | 2.3 | 2.8 | 2.9 | 2.8 | 2.8 | 3.3 | 2.8 | 2.3 | 2.5 | 2.9 |
| COMMERCIAL-RESIDENTIAL | .6 | .7 | .8 | .8 | .8 | .9 | .9 | .7 | .6 | .7 |
| ANTHRACITE COAL | | | | | | | | | | |
| ALL USES | .0 | .0 | .0 | .0 | .0 | .0 | NA | NA | NA | NA |
| RESIDUAL OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | NA | NA | NA | NA | NA | .6 | .6 | .6 | .7 | 1.1 |
| COMMERCIAL | NA | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .9 |
| DISTILLATE OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | NA | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .0 |
| COMMERCIAL-RESIDENTIAL | NA | NA | NA | NA | NA | .0 | .0 | .0 | .0 | .4 |
| NATURAL GAS | | | | | | | | | | |
| ELECTRIC UTILITIES | NA | NA | NA | NA | .0 | .0 | .0 | .1 | .2 | .1 |
| INDUSTRIAL | NA | NA | NA | NA | 5.6 | 25.0 | 21.6 | 4.1 | 5.8 | 6.0 |
| PIPELINES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COMMERCIAL-RESIDENTIAL | NA | NA | NA | .0 | .1 | .1 | .2 | .1 | .2 | .3 |
| WOOD | | | | | | | | | | |
| ALL USES | .2 | .2 | .2 | .1 | .1 | .1 | .1 | .1 | .1 | .1 |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE | .0 | .0 | .0 | .1 | .4 | .8 | 1.4 | 1.8 | 2.6 | 2.3 |
| DIESEL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL | 2.7 | 3.4 | 3.5 | 3.1 | 3.1 | 2.5 | 2.0 | 1.6 | 1.6 | 2.2 |
| -OIL | NA | NA | NA | NA | NA | 11.8 | 11.1 | 9.1 | 8.8 | 17.2 |
| COKE PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS FUEL OIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CEMENT PLANTS | .0 | .0 | .0 | .0 | NA | NA | NA | NA | NA | NA |
| WILD FIRES | .0 | .0 | .0 | .0 | .0 | .0 | .1 | 1.1 | 2.2 | .1 |
| MISCELLANEOUS | .9 | 1.0 | 1.2 | 1.3 | 1.3 | 1.6 | 1.8 | 1.6 | 1.4 | 2.3 |

TABLE 6. NOX EMISSIONS (1000 TONS) 1950-1980 WYOMING

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | |
| ELECTRIC UTILITIES | 2.3 | 3.9 | 9.4 | 22.3 | 41.3 | 83.8 | 132.8 | 190.3 |
| INDUSTRIAL BOILERS | 1.3 | 1.3 | 1.1 | 2.1 | 1.9 | 5.1 | 14.4 | 15.8 |
| COMMERCIAL-RESIDENTIAL | .3 | .2 | .3 | .2 | .1 | .2 | .3 | .5 |
| ANTHRACITE COAL | | | | | | | | |
| ALL USES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDUAL OIL | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | 1.6 | 1.2 | .5 | .7 | .7 | 1.6 | 1.9 | 2.4 |
| COMMERCIAL | .0 | .0 | .2 | .2 | .2 | .4 | .7 | .0 |
| DISTILLATE OIL | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .1 | .0 | .0 | .0 | .2 | .2 | .3 |
| INDUSTRIAL | .3 | .4 | .5 | .5 | .6 | .8 | 1.3 | 2.5 |
| COMMERCIAL-RESIDENTIAL | .1 | .2 | .1 | .2 | .3 | .6 | .6 | .2 |
| NATURAL GAS | | | | | | | | |
| ELECTRIC UTILITIES | .3 | .2 | .2 | .0 | .6 | .2 | .2 | .1 |
| INDUSTRIAL | 10.2 | 8.5 | 13.3 | 12.6 | 3.5 | 3.1 | 2.6 | 2.1 |
| PIPELINES | .2 | 15.1 | 2.2 | 2.8 | 56.4 | 25.5 | 34.2 | 29.5 |
| COMMERCIAL-RESIDENTIAL | .5 | .7 | .7 | .9 | 1.6 | 1.1 | 1.1 | 1.6 |
| WOOD | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | .0 | .0 | .0 | .0 | .0 | .0 | .1 | .0 |
| COMMERCIAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDENTIAL | .2 | .1 | .1 | .1 | .1 | .1 | .1 | .2 |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE | 6.3 | 8.0 | 9.2 | 10.1 | 11.6 | 14.5 | 17.1 | 16.3 |
| DIESEL | .8 | 1.2 | 1.8 | 3.6 | 6.3 | 9.6 | 13.8 | 13.6 |
| OTHER | | | | | | | | |
| RAILROADS-COAL | 1.2 | .4 | .1 | .0 | .0 | .0 | .0 | .0 |
| -OIL | 18.7 | 16.6 | 18.5 | 18.9 | 20.7 | 17.9 | 21.3 | 32.4 |
| COKE PLANTS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS-DISTILLATE | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -RESIDUAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| OFF HIGHWAY DIESEL | 1.3 | 1.5 | 4.8 | 5.4 | 3.9 | 7.3 | 12.3 | 15.3 |
| CEMENT PLANT | .1 | .1 | .1 | .2 | .2 | .2 | .3 | .2 |
| WILD FIRES | .0 | .3 | .6 | .1 | 1.2 | 1.3 | .6 | 1.0 |
| MISCELLANEOUS | 3.4 | 3.3 | 3.2 | 3.9 | 4.4 | 3.4 | 3.4 | 3.1 |

TABLE 7. NOX EMISSIONS (1000 TONS) 1900-1945 FOR THE U.S.

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | | | |
| ELECTRIC UTILITIES | 99.1 | 164.5 | 224.6 | 299.7 | 378.1 | 483.2 | 487.5 | 352.2 | 559.8 | 816.7 |
| INDUSTRIAL BOILERS | 683.9 | 950.7 | 1197.1 | 1445.9 | 1520.3 | 1585.8 | 1332.5 | 1077.0 | 1198.5 | 1362.0 |
| COMMERCIAL-RESIDENTIAL | 71.5 | 102.5 | 133.9 | 177.1 | 185.7 | 211.8 | 229.3 | 186.2 | 195.5 | 274.2 |
| ANTHRACITE COAL | | | | | | | | | | |
| ALL USES | 414.0 | 561.7 | 605.4 | 634.6 | 640.5 | 478.1 | 249.9 | 188.6 | 313.8 | 319.2 |
| RESIDUAL OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | 40.2 | 31.9 | 28.5 | 34.3 | 41.8 |
| INDUSTRIAL | .0 | .0 | .0 | .0 | .0 | 133.4 | 127.6 | 126.1 | 132.8 | 166.0 |
| COMMERCIAL | .0 | .0 | .0 | .0 | .0 | 3.0 | 5.0 | 8.6 | 11.6 | 56.9 |
| DISTILLATE OIL | | | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | 9.9 | 7.7 | 6.4 | 7.2 | 11.8 |
| INDUSTRIAL | .0 | .0 | .0 | .0 | .0 | 4.4 | 4.0 | 4.0 | 5.4 | 13.1 |
| COMMERCIAL-RESIDENTIAL | .0 | .0 | .0 | .0 | .0 | 5.2 | 9.2 | 14.9 | 21.0 | 36.3 |
| NATURAL GAS | | | | | | | | | | |
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | 5.4 | 11.2 | 29.4 | 30.8 | 44.6 | 79.7 |
| INDUSTRIAL | .0 | .0 | 212.1 | 250.2 | 307.3 | 542.7 | 858.2 | 651.1 | 908.3 | 1251.2 |
| PIPELINES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| COMMERCIAL-RESIDENTIAL | .0 | .0 | 8.4 | 9.9 | 14.3 | 13.6 | 18.8 | 15.6 | 28.7 | 41.9 |
| WOOD | | | | | | | | | | |
| ALL USES | 113.5 | 108.0 | 103.7 | 98.7 | 94.0 | 89.6 | 84.9 | 81.7 | 79.5 | 73.9 |
| HIGHWAY VEHICLES | | | | | | | | | | |
| GASOLINE | .0 | 1.6 | 13.8 | 70.8 | 248.9 | 535.8 | 903.0 | 1005.5 | 1345.2 | 1170.0 |
| DIESEL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| MISCELLANEOUS | | | | | | | | | | |
| RAILROADS-COAL | 315.1 | 459.1 | 576.2 | 645.2 | 714.0 | 592.4 | 509.4 | 398.8 | 440.6 | 641.8 |
| -OIL | .0 | .0 | .0 | .0 | .0 | 700.4 | 658.3 | 539.5 | 529.2 | 985.0 |
| COKE PLANTS | 4.5 | 5.9 | 8.5 | 9.0 | 10.9 | 10.2 | 10.0 | 7.3 | 11.7 | 13.9 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS FUEL OIL | .0 | .0 | .0 | .0 | .0 | 704.7 | 836.4 | 662.6 | 583.5 | 893.2 |
| CEMENT PLANTS | 2.0 | 8.6 | 15.2 | 18.9 | 20.9 | 29.4 | 27.9 | 13.4 | 23.3 | 17.0 |
| WILD FIRES | 441.2 | 441.2 | 441.2 | 441.2 | 441.2 | 441.2 | 843.7 | 555.0 | 478.5 | 362.9 |
| MISCELLANEOUS | 464.4 | 510.7 | 562.3 | 570.8 | 577.2 | 674.5 | 750.8 | 682.2 | 603.5 | 918.4 |

TABLE 7. NOX EMISSIONS (1000 TONS) 1950-1980 FOR THE U.S.

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | | | | | | | | |
| ELECTRIC UTILITIES | 1023.2 | 1558.5 | 1984.1 | 2763.8 | 3751.7 | 4836.1 | 5208.0 | 6476.0 |
| INDUSTRIAL BOILERS | 779.7 | 756.7 | 837.8 | 963.4 | 769.6 | 477.5 | 555.0 | 553.8 |
| COMMERCIAL-RESIDENTIAL | 157.7 | 99.2 | 149.1 | 93.5 | 69.5 | 23.2 | 9.7 | 30.9 |
| ANTHRACITE COAL | | | | | | | | |
| ALL USES | 302.9 | 190.3 | 130.4 | 94.5 | 68.3 | 42.4 | 45.2 | 32.4 |
| RESIDUAL OIL | | | | | | | | |
| ELECTRIC UTILITIES | 111.7 | 91.1 | 98.2 | 132.0 | 366.8 | 535.1 | 628.0 | 455.3 |
| INDUSTRIAL | 230.5 | 259.2 | 232.4 | 200.1 | 203.1 | 186.9 | 260.2 | 242.2 |
| COMMERCIAL | 18.7 | 21.3 | 69.9 | 87.3 | 124.7 | 97.4 | 101.0 | 53.5 |
| DISTILLATE OIL | | | | | | | | |
| ELECTRIC UTILITIES | 22.8 | 10.1 | 7.9 | 5.9 | 41.9 | 109.6 | 130.7 | 52.5 |
| INDUSTRIAL | 30.2 | 35.6 | 29.9 | 35.8 | 36.9 | 52.5 | 77.4 | 65.6 |
| COMMERCIAL-RESIDENTIAL | 47.6 | 59.7 | 211.0 | 224.7 | 243.7 | 221.0 | 236.8 | 141.7 |
| NATURAL GAS | | | | | | | | |
| ELECTRIC UTILITIES | 154.1 | 282.6 | 489.3 | 567.7 | 947.8 | 776.3 | 775.1 | 939.7 |
| INDUSTRIAL | 1643.9 | 2128.2 | 2004.5 | 2301.1 | 551.2 | 487.0 | 458.8 | 497.1 |
| PIPELINES | 156.9 | 320.1 | 1152.7 | 1615.5 | 2632.5 | 2445.1 | 2700.9 | 2037.5 |
| COMMERCIAL-RESIDENTIAL | 119.1 | 119.1 | 206.1 | 267.1 | 359.9 | 371.3 | 370.0 | 419.5 |
| WOOD | | | | | | | | |
| ELECTRIC UTILITIES | .5 | .2 | .1 | .1 | .2 | .0 | .1 | .1 |
| INDUSTRIAL | 37.4 | 44.4 | 47.8 | 60.0 | 71.5 | 74.7 | 98.4 | 97.3 |
| COMMERCIAL | .8 | .6 | .5 | .4 | .3 | .3 | .5 | .7 |
| RESIDENTIAL | 82.4 | 62.9 | 50.9 | 37.9 | 32.5 | 34.5 | 50.5 | 66.3 |
| HIGHWAY VEHICLES | | | | | | | | |
| GASOLINE | 2157.0 | 2750.7 | 3245.6 | 3959.6 | 5201.7 | 6023.8 | 6273.1 | 5677.1 |
| DIESEL | 128.5 | 144.1 | 223.3 | 452.3 | 1004.6 | 1328.8 | 1781.5 | 1978.8 |
| MISCELLANEOUS | | | | | | | | |
| RAILROADS-COAL | 314.9 | 84.7 | 16.1 | 3.2 | 1.4 | .0 | .0 | .0 |
| -OIL | 851.4 | 774.6 | 715.5 | 702.6 | 704.1 | 727.1 | 776.2 | 826.6 |
| COKE PLANTS | 1.9 | 2.2 | 1.6 | 1.9 | 1.9 | 1.7 | 1.3 | 1.3 |
| SMELTERS-COPPER | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -ZINC | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| -LEAD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| VESSELS-DISTILLATE | 25.1 | 32.5 | 35.9 | 29.2 | 36.4 | 49.0 | 68.7 | 52.7 |
| -RESIDUAL | 116.2 | 143.9 | 116.4 | 90.5 | 109.9 | 118.9 | 192.8 | 264.7 |
| OFF HIGHWAY DIESEL | 112.3 | 165.8 | 299.0 | 394.7 | 390.5 | 383.3 | 543.7 | 355.9 |
| CEMENT PLANTS | 54.5 | 71.7 | 76.6 | 88.6 | 92.3 | 84.2 | 103.2 | 93.4 |
| WILD FIRES | 295.3 | 159.8 | 103.0 | 63.3 | 56.0 | 41.8 | 84.7 | 83.2 |
| MISCELLANEOUS | 1331.2 | 1192.6 | 1074.2 | 1342.1 | 1531.3 | 971.1 | 881.9 | 762.8 |

# SECTION 4.0

# STATE SUMMARY BY FUEL TYPE

TABLE 7. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY FUEL TYPE FOR ALABAMA

| FUEL TYPE | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 70.9 | 104.4 | 136.2 | 167.0 | 184.4 | 192.8 | 173.4 | 135.5 | 161.7 | 221.1 |
| ANTHRACITE COAL | .1 | .1 | .1 | .1 | .1 | .1 | .0* | .0* | .0* | .0* |
| RESIDUAL OIL | .0* | .0* | .0* | .0* | .0* | 8.8 | 10.4 | 8.5 | 7.9 | 16.1 |
| DISTILLATE OIL | .0* | .0* | .0* | .0* | .0* | .3 | .3 | .3 | .5 | 1.3 |
| NATURAL GAS | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| WOOD | .5 | .5 | .5 | .5 | .4 | .4 | .4 | .4 | .4 | .3 |
| GASOLINE, DIESEL | .0* | .0* | .0* | .0* | .1* | .2* | .4* | .4* | .6* | .7* |
| OTHER | 30.8* | 33.4* | 36.3* | 37.9* | 39.1* | 43.1* | 45.0* | 44.3 | 42.5 | 51.6 |
| TOTAL | 102.3 | 138.4 | 173.1 | 205.5 | 224.2 | 245.7 | 229.9 | 189.5 | 213.5 | 291.2 |

*- MAY NOT INCLUDE ALL EMISSIONS BECAUSE DATUM WAS NOT AVAILABLE



TABLE 8 . SUMMARY OF NOX EMISSIONS (1000 TONS) BY FUEL TYPE FOR ALABAMA

| FUEL TYPE | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 15.9 | 23.2 | 30.2 | 36.9 | 40.5 | 42.2 | 36.9 | 28.7 | 35.1 | 46.9 |
| ANTHRACITE COAL | .0 | .1 | .1 | .1 | .1 | .1 | .0* | .0* | .0* | .0* |
| RESIDUAL OIL | .0* | .0* | .0* | .0* | .0* | 12.0 | 14.2 | 11.3 | 9.6 | 17.7 |
| DISTILLATE OIL | .0* | .0* | .0* | .0* | .0* | 1.1 | 1.0 | .9 | 1.1 | 3.5 |
| NATURAL GAS | .0* | .0* | .0* | .1* | .0* | .0* | .5* | 7.1* | 9.9* | 17.7* |
| WOOD | 3.9 | 3.7 | 3.6 | 3.4 | 3.3 | 3.1 | 2.9 | 2.8 | 2.7 | 2.5 |
| GASOLINE, DIESEL | .0* | .0* | .2* | .8* | 2.9* | 6.3* | 10.1* | 10.2* | 15.4* | 16.9* |
| OTHER | 72.4* | 73.4* | 74.4* | 74.6* | 74.8* | 76.4* | 45.7* | 53.8 | 30.3 | 33.3 |
| TOTAL | 92.2 | 100.4 | 108.4 | 115.9 | 121.5 | 141.1 | 111.4 | 114.8 | 104.2 | 138.6 |

TABLE 9. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY FUEL TYPE FOR ALABAMA

| FUEL TYPE | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 183.0 | 308.5 | 366.5 | 654.2 | 847.3 | 994.0 | 635.1 | 679.0 |
| ANTHRACITE COAL | .0 | .0 | .4 | .6 | .0 | .0 | .0 | .7 |
| RESIDUAL OIL | 6.8 | 10.4 | 12.3 | 6.0 | 11.6 | 46.9 | 62.3* | 31.9 |
| DISTILLATE OIL | 2.8 | 4.1 | 3.6 | 2.8 | 3.9 | 6.6 | 8.0 | 5.4 |
| NATURAL GAS | .0 | .1 | .1 | .1 | .1 | .1 | .1 | .1 |
| WOOD | .5 | .4 | .4 | .3 | .3 | .3 | .3 | .3 |
| GASOLINE, DIESEL | 1.6 | 2.2 | 3.1 | 3.8 | 5.8 | 7.9 | 11.2 | 10.6 |
| OTHER(SMELTERS & MISC.) | 61.0 | 61.2 | 62.1 | 66.1 | 69.3 | 60.9 | 63.7 | 59.9 |
| TOTAL | 255.8 | 386.9 | 448.5 | 733.9 | 938.2 | 1116.7 | 780.7 | 788.0 |



TABLE 10. SUMMARY OF NOX EMISSIONS (1000 TONS) BY FUEL TYPE FOR ALABAMA

| FUEL TYPE | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 31.8 | 71.2 | 91.1 | 170.4 | 206.8 | 244.7 | 192.4 | 238.4 |
| ANTHRACITE COAL | .0 | .0 | .2 | .3 | .0 | .0 | .0 | .4 |
| RESIDUAL OIL | 2.5 | 4.5 | 4.7 | 2.3 | 3.7 | 13.3 | 17.2 | 8.3 |
| DISTILLATE OIL | 6.4 | 11.0 | 13.2 | 13.4 | 17.8 | 26.2 | 29.6 | 25.4 |
| NATURAL GAS | 36.1 | 52.1 | 51.2 | 62.1 | 45.5 | 40.0 | 32.9 | 48.7 |
| WOOD | 4.2 | 3.7 | 3.4 | 3.5 | 3.8 | 4.2 | 4.8 | 4.9 |
| GASOLINE, DIESEL | 37.8 | 52.1 | 72.0 | 87.0 | 112.4 | 152.2 | 186.0 | 162.1 |
| OTHER(SMELTERS & MISC.) | 35.7 | 29.8 | 26.4 | 29.1 | 32.7 | 22.2 | 26.8 | 20.6 |
| TOTAL | 154.4 | 224.4 | 262.3 | 368.2 | 422.6 | 502.7 | 489.7 | 508.8 |

TABLE 7. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY FUEL TYPE FOR ARIZONA

| FUEL TYPE | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 4.1 | 7.3 | 11.0 | 14.5 | 17.5 | 16.5 | 14.5 | 11.0 | 11.4 | 14.7 |
| ANTHRACITE COAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDUAL OIL | .0* | .0* | .0* | .0* | .0* | 12.1 | 11.2 | 10.9 | 7.3 | 6.7* |
| DISTILLATE OIL | .0* | .0* | .0* | .0* | .0* | 3.1* | 2.9* | 2.5* | 2.7* | 2.6* |
| NATURAL GAS | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| WOOD | .1 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| GASOLINE, DIESEL | .0* | .0* | .0* | .0* | .0* | .1* | .2* | .2* | .2* | .3* |
| OTHER | 130.7* | 252.0* | 333.4* | 459.0* | 537.5* | 723.4 | 542.6 | 315.5 | 648.1 | 636.4 |
| TOTAL | 134.8 | 259.4 | 344.4 | 473.6 | 555.1 | 755.2 | 571.5 | 340.2 | 669.8 | 660.7 |

*- MAY NOT INCLUDE ALL EMISSIONS BECAUSE DATUM WAS NOT AVAILABLE



TABLE 8 . SUMMARY OF NOX EMISSIONS (1000 TONS) BY FUEL TYPE FOR ARIZONA

| FUEL TYPE | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 1.2 | 2.1 | 3.2 | 4.2 | 5.3 | 5.4 | 4.8 | 3.7 | 3.9 | 4.8 |
| ANTHRACITE COAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDUAL OIL | .0* | .0* | .0* | .0* | .0* | 2.3 | 2.1 | 2.0 | 1.5 | 1.2* |
| DISTILLATE OIL | .0* | .0* | .0* | .0* | .0* | 18.7* | 17.6* | 14.5* | 15.6* | 13.8* |
| NATURAL GAS | .0* | .0* | .0* | .0* | .0* | .0* | .0* | 5.0* | 7.1* | 7.9* |
| WOOD | .4 | .4 | .4 | .3 | .3 | .3 | .3 | .3 | .3 | .3 |
| GASOLINE, DIESEL | .0* | .0* | .0* | .2* | .8* | 1.7* | 4.1* | 4.1* | 6.0* | 6.5* |
| OTHER | 1.1* | 1.3* | 1.6* | 1.6* | 1.7* | 2.4 | 2.8 | 3.1 | 2.3 | 3.7 |
| TOTAL | 2.7 | 3.8 | 5.2 | 6.4 | 8.1 | 30.9 | 31.7 | 32.7 | 36.6 | 38.2 |

TABLE 9. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY FUEL TYPE FOR ARIZONA

| FUEL TYPE | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 9.9 | 6.7 | 11.5 | 15.4 | 9.6 | 38.8 | 67.0 | 94.0 |
| ANTHRACITE COAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDUAL OIL | 1.0 | .3 | .5 | .2 | .3 | 12.9 | 10.0 | 3.1 |
| DISTILLATE OIL | 2.3 | 1.1 | 2.2 | 2.3 | 2.4 | 8.7 | 7.3 | 4.5 |
| NATURAL GAS | .0 | .0 | .0 | .0 | .1 | .0 | .1 | .0 |
| WOOD | .1 | .0 | .0 | .0 | .0 | .1 | .1 | .1 |
| GASOLINE, DIESEL | .9 | 1.2 | 1.8 | 2.3 | 4.1 | 5.1 | 7.2 | 7.2 |
| OTHER(SMELTERS & MISC.) | 1076.4 | 1209.5 | 1430.2 | 1858.9 | 2249.2 | 1373.6 | 823.1 | 684.2 |
| TOTAL | 1090.6 | 1218.8 | 1446.2 | 1879.2 | 2265.7 | 1439.2 | 914.7 | 793.1 |



TABLE 10. SUMMARY OF NOX EMISSIONS (1000 TONS) BY FUEL TYPE FOR ARIZONA

| FUEL TYPE | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 3.1 | 2.1 | 2.8 | 5.7 | 7.2 | 47.2 | 94.6 | 151.8 |
| ANTHRACITE COAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDUAL OIL | .2 | .1 | .1 | .0 | .1 | 6.2 | 4.0 | 1.2 |
| DISTILLATE OIL | 10.7 | .9 | 7.9 | 9.6 | 9.1 | 15.8 | 16.8 | 13.0 |
| NATURAL GAS | 22.5 | 35.3 | 40.3 | 51.4 | 51.0 | 32.8 | 38.5 | 44.3 |
| WOOD | .4 | .3 | .3 | .3 | .3 | .4 | .5 | .6 |
| GASOLINE, DIESEL | 17.1 | 24.3 | 37.8 | 48.5 | 75.6 | 95.9 | 116.6 | 107.9 |
| OTHER(SMELTERS & MISC.) | 6.9 | 6.0 | 5.0 | 9.0 | 12.1 | 6.5 | 4.8 | 7.5 |
| TOTAL | 60.8 | 69.0 | 94.2 | 124.5 | 155.5 | 204.8 | 275.9 | 326.4 |

TABLE 7. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY FUEL TYPE FOR ARKANSAS

| FUEL TYPE | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 62.5 | 93.2 | 121.4 | 145.5 | 155.5 | 134.1 | 112.4 | 80.7 | 80.8 | 100.1 |
| ANTHRACITE COAL | .0 | .0 | .0 | .0 | .0 | .0 | .0* | .0* | .0* | .0* |
| RESIDUAL OIL | .0* | .0* | .0* | .0* | .0* | 1.8* | 2.3* | 2.9* | 2.9* | 1.7 |
| DISTILLATE OIL | .0* | .0* | .0* | .0* | .0* | 2.7* | 2.6* | 2.3* | 2.2* | 3.7 |
| NATURAL GAS | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| WOOD | .4 | .4 | .4 | .4 | .4 | .3 | .3 | .3 | .3 | .3 |
| GASOLINE, DIESEL | .0* | .0* | .0* | .0* | .1* | .2* | .3* | .3* | .4* | .5* |
| OTHER | 16.9* | 18.0* | 19.2* | 19.4* | 29.8* | 35.9* | 27.7* | 22.6* | 39.3* | 32.9 |
| TOTAL | 79.8 | 111.6 | 141.1 | 165.3 | 185.8 | 175.1 | 145.5 | 109.2 | 125.9 | 139.2 |

*- MAY NOT INCLUDE ALL EMISSIONS BECAUSE DATUM WAS NOT AVAILABLE



TABLE 8 . SUMMARY OF NOX EMISSIONS (1000 TONS) BY FUEL TYPE FOR ARKANSAS

| FUEL TYPE | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 5.6 | 8.4 | 10.9 | 13.1 | 13.8 | 11.8 | 9.5 | 6.8 | 6.9 | 8.3 |
| ANTHRACITE COAL | .0 | .0 | .0 | .0 | .0 | .0 | .0* | .0* | .0* | .0* |
| RESIDUAL OIL | .0* | .0* | .0* | .0* | .0* | .4* | .4* | .5* | .5* | .7 |
| DISTILLATE OIL | .0* | .0* | .0* | .0* | .0* | 15.3* | 14.4* | 11.9* | 10.8* | 17.7 |
| NATURAL GAS | .0* | .0* | .0* | .1* | 8.7* | 27.4* | 17.6* | 10.0* | 14.1* | 34.0* |
| WOOD | 3.3 | 3.1 | 3.0 | 2.9 | 2.7 | 2.6 | 2.5 | 2.4 | 2.3 | 2.2 |
| GASOLINE, DIESEL | .0* | .0* | .1* | .6* | 2.1* | 4.6* | 7.9* | 7.8* | 11.0* | 11.8* |
| OTHER | 149.0* | 149.6* | 150.3* | 150.4* | 150.4* | 151.2* | 98.6* | 35.4* | 33.7* | 13.9 |
| TOTAL | 158.0 | 161.1 | 164.4 | 167.2 | 177.8 | 213.1 | 151.0 | 74.8 | 79.4 | 88.5 |

TABLE 9. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY FUEL TYPE FOR ARKANSAS

| FUEL TYPE | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 43.9 | 19.3 | 6.9 | 6.3 | 5.0 | 5.7 | 31.1 | 45.7 |
| ANTHRACITE COAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDUAL OIL | 1.5 | .9 | 2.5 | 1.9 | 10.3 | 40.6 | 70.0 | 23.3 |
| DISTILLATE OIL | 5.1 | 2.7 | 1.2 | 1.8 | 2.7 | 5.7 | 5.3 | 2.9 |
| NATURAL GAS | .0 | .1 | .1 | .1 | .1 | .1 | .1 | .1 |
| WOOD | .4 | .4 | .3 | .2 | .2 | .2 | .3 | .2 |
| GASOLINE, DIESEL | 1.2 | 1.5 | 1.9 | 2.4 | 4.1 | 5.2 | 7.4 | 7.1 |
| OTHER(SMELTERS & MISC.) | 29.1 | 30.4 | 15.2 | 13.2 | 12.2 | 8.9 | 9.2 | 8.7 |
| TOTAL | 81.3 | 55.2 | 28.2 | 26.0 | 34.5 | 66.4 | 123.4 | 88.1 |



TABLE 10. SUMMARY OF NOX EMISSIONS (1000 TONS) BY FUEL TYPE FOR ARKANSAS

| FUEL TYPE | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 3.9 | 2.2 | 1.3 | 1.3 | 1.1 | 1.5 | 24.8 | 43.9 |
| ANTHRACITE COAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDUAL OIL | .4 | .2 | .5 | .5 | 1.8 | 9.5 | 19.5 | 5.3 |
| DISTILLATE OIL | 21.3 | 8.4 | 5.2 | 8.8 | 10.1 | 21.2 | 16.3 | 13.8 |
| NATURAL GAS | 53.7 | 79.1 | 69.8 | 88.2 | 70.3 | 36.1 | 34.5 | 43.7 |
| WOOD | 3.5 | 3.1 | 2.8 | 2.6 | 2.5 | 2.6 | 3.8 | 3.3 |
| GASOLINE, DIESEL | 27.5 | 35.1 | 45.5 | 58.4 | 76.1 | 93.5 | 114.9 | 103.9 |
| OTHER(SMELTERS & MISC.) | 17.2 | 14.6 | 16.5 | 11.9 | 12.5 | 6.9 | 6.6 | 7.8 |
| TOTAL | 127.6 | 142.8 | 141.7 | 171.6 | 174.5 | 171.3 | 220.4 | 221.6 |

TABLE 7. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY FUEL TYPE FOR CALIFORNIA

| FUEL TYPE | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 54.9 | 74.3 | 84.0 | 91.1 | 94.6 | 83.1 | 63.7 | 51.8 | 59.9 | 76.9 |
| ANTHRACITE COAL | .0 | .0 | .0 | .0 | .0 | .0 | .0* | .0* | .0* | .0* |
| RESIDUAL OIL | .0* | .0* | .0* | .0* | .0* | 237.1 | 275.2 | 257.8 | 278.0 | 588.3 |
| DISTILLATE OIL | .0* | .0* | .0* | .0* | .0* | 28.6 | 28.6 | 26.6 | 24.5 | 47.1 |
| NATURAL GAS | .0* | .0* | .0* | .0* | .0* | .1* | .1* | .1* | .1* | .2* |
| WOOD | .8 | .8 | .8 | .7 | .7 | .7 | .6 | .6 | .6 | .5 |
| GASOLINE, DIESEL | .0* | .0* | .0* | .2* | .8* | 1.8* | 2.8* | 3.2* | 4.3* | 4.4* |
| OTHER | 84.2* | 82.2* | 122.0* | 121.1* | 96.2* | 153.1 | 143.5 | 113.6 | 116.2 | 164.6 |
| TOTAL | 140.0 | 157.3 | 206.8 | 213.2 | 192.3 | 504.3 | 514.6 | 453.7 | 483.5 | 881.9 |

*- MAY NOT INCLUDE ALL EMISSIONS BECAUSE DATUM WAS NOT AVAILABLE



TABLE 8 . SUMMARY OF NOX EMISSIONS (1000 TONS) BY FUEL TYPE FOR CALIFORNIA

| FUEL TYPE | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 15.5 | 20.8 | 23.6 | 25.5 | 25.8 | 21.7 | 16.5 | 13.4 | 15.5 | 20.1 |
| ANTHRACITE COAL | .0 | .0 | .0 | .0 | .0 | .0 | .0* | .0* | .0* | .0* |
| RESIDUAL OIL | .0* | .0* | .0* | .0* | .0* | 232.0 | 273.1 | 221.0 | 199.6 | 272.7 |
| DISTILLATE OIL | .0* | .0* | .0* | .0* | .0* | 168.5 | 158.9 | 131.1 | 129.4 | 238.9 |
| NATURAL GAS | .0* | .0* | 15.1* | 10.8* | 34.2* | 103.6* | 163.4* | 89.3* | 125.9* | 152.0* |
| WOOD | 6.2 | 5.9 | 5.6 | 5.4 | 5.2 | 4.9 | 4.7 | 4.5 | 4.3 | 4.0 |
| GASOLINE, DIESEL | .0* | .2* | 1.2* | 6.1* | 21.5* | 46.2* | 71.9* | 82.8* | 108.9* | 111.4* |
| OTHER | 27.2* | 30.7* | 34.6* | 36.0* | 37.0* | 48.0 | 58.2 | 49.5 | 42.4 | 89.9 |
| TOTAL | 48.9 | 57.6 | 80.2 | 83.8 | 123.6 | 624.9 | 746.4 | 591.5 | 626.0 | 889.1 |

TABLE 9. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY FUEL TYPE FOR CALIFORNIA

| FUEL TYPE | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 80.6 | 70.8 | 46.1 | 58.3 | 57.2 | 45.8 | 65.7 | 66.6 |
| ANTHRACITE COAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDUAL OIL | 261.2 | 277.2 | 198.0 | 153.1 | 220.6 | 211.4 | 207.2 | 265.6 |
| DISTILLATE OIL | 32.3 | 31.3 | 18.4 | 16.7 | 19.6 | 20.0 | 23.5 | 19.5 |
| NATURAL GAS | .2 | .2 | .4 | .5 | .6 | .5 | .5 | .5 |
| WOOD | .7 | .6 | .5 | .5 | .6 | .7 | .9 | 1.0 |
| GASOLINE, DIESEL | 12.4 | 14.3 | 18.2 | 26.3 | 33.0 | 36.3 | 47.2 | 46.5 |
| OTHER(SMELTERS & MISC.) | 205.2 | 187.4 | 179.3 | 230.8 | 228.4 | 183.7 | 187.5 | 174.6 |
| TOTAL | 592.6 | 581.8 | 460.9 | 486.2 | 560.0 | 498.4 | 532.3 | 574.2 |



TABLE 10. SUMMARY OF NOX EMISSIONS (1000 TONS) BY FUEL TYPE FOR CALIFORNIA

| FUEL TYPE | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 24.2 | 20.5 | 10.5 | 15.1 | 13.2 | 12.0 | 22.9 | 24.8 |
| ANTHRACITE COAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDUAL OIL | 64.2 | 79.7 | 78.4 | 61.4 | 72.4 | 134.5 | 168.4 | 192.6 |
| DISTILLATE OIL | 129.1 | 94.6 | 55.4 | 74.1 | 89.3 | 63.8 | 69.5 | 68.7 |
| NATURAL GAS | 200.9 | 279.6 | 279.4 | 359.5 | 373.7 | 282.9 | 246.6 | 293.7 |
| WOOD | 6.4 | 6.3 | 6.0 | 7.1 | 8.5 | 9.3 | 11.7 | 12.3 |
| GASOLINE, DIESEL | 225.4 | 264.3 | 364.1 | 481.7 | 633.7 | 687.9 | 785.1 | 703.3 |
| OTHER(SMELTERS & MISC.) | 135.1 | 118.6 | 107.5 | 155.2 | 204.8 | 130.3 | 118.9 | 108.5 |
| TOTAL | 785.3 | 863.5 | 901.4 | 1154.1 | 1395.4 | 1320.8 | 1423.1 | 1403.9 |

TABLE 7. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY FUEL TYPE FOR COLORADO

| FUEL TYPE | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 34.0 | 48.1 | 58.6 | 69.7 | 70.7 | 67.3 | 58.8 | 43.3 | 44.0 | 52.7 |
| ANTHRACITE COAL | .0 | .0 | .0 | .0 | .0 | .0 | .0* | .0* | .0* | .0* |
| RESIDUAL OIL | .0* | .0* | .0* | .0* | .0* | 1.4 | 1.4 | 1.4 | 2.0 | 4.0 |
| DISTILLATE OIL | .0* | .0* | .0* | .0* | .0* | .3* | .3* | .3* | .7* | 1.7* |
| NATURAL GAS | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| WOOD | .1 | .1 | .1 | .1 | .1 | .1 | .1 | .1 | .1 | .1 |
| GASOLINE, DIESEL | .0* | .0* | .0* | .0* | .1* | .2* | .4* | .4* | .5* | .5* |
| OTHER | 39.3* | 38.9* | 35.9* | 32.2* | 19.5* | 24.1* | 31.1* | 29.3 | 43.4 | 22.1 |
| TOTAL | 73.4 | 87.1 | 94.5 | 102.0 | 90.3 | 93.4 | 92.0 | 74.7 | 90.7 | 81.1 |

*- MAY NOT INCLUDE ALL EMISSIONS BECAUSE DATUM WAS NOT AVAILABLE



TABLE 8 . SUMMARY OF NOX EMISSIONS (1000 TONS) BY FUEL TYPE FOR COLORADO

| FUEL TYPE | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 22.7 | 31.5 | 38.7 | 45.4 | 45.3 | 41.1 | 33.4 | 24.7 | 26.5 | 31.0 |
| ANTHRACITE COAL | .0 | .0 | .0 | .0 | .0 | .0 | .0* | .0* | .0* | .0* |
| RESIDUAL OIL | .0* | .0* | .0* | .0* | .0* | .2 | .2 | .2 | .3 | .7 |
| DISTILLATE OIL | .0* | .0* | .0* | .0* | .0* | 1.6* | 1.5* | 1.2* | 2.9* | 8.2* |
| NATURAL GAS | .0* | .0* | .0* | .0* | .0* | .3* | 7.1* | 5.0* | 7.0* | 11.1* |
| WOOD | .6 | .6 | .6 | .5 | .5 | .5 | .5 | .5 | .4 | .4 |
| GASOLINE, DIESEL | .0* | .0* | .1* | .5* | 1.9* | 4.1* | 6.4* | 6.5* | 8.8* | 8.2* |
| OTHER | 2.9* | 3.5* | 4.2* | 4.2* | 4.2* | 4.9* | 5.3* | 4.8 | 4.2 | 7.5 |
| TOTAL | 26.2 | 35.6 | 43.5 | 50.7 | 51.9 | 52.7 | 54.3 | 42.8 | 50.1 | 67.1 |

TABLE 9. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY FUEL TYPE FOR COLORADO

| FUEL TYPE | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 28.9 | 23.2 | 44.4 | 60.2 | 53.2 | 71.0 | 98.6 | 116.7 |
| ANTHRACITE COAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDUAL OIL | 4.8 | 5.8 | 10.9 | 7.6 | 8.9 | 14.2 | 18.1 | 8.7 |
| DISTILLATE OIL | 1.7 | 3.1 | 3.6 | 3.5 | 3.2 | 4.9 | 5.5 | 5.4 |
| NATURAL GAS | .0 | .1 | .1 | .1 | .1 | .1 | .1 | .1 |
| WOOD | .1 | .1 | .1 | .1 | .1 | .1 | .1 | .1 |
| GASOLINE, DIESEL | 1.2 | 1.6 | 2.3 | 3.1 | 4.1 | 5.0 | 6.1 | 6.7 |
| OTHER(SMELTERS & MISC.) | 24.8 | 20.4 | 20.3 | 52.1 | 17.7 | 15.4 | 13.6 | 12.7 |
| TOTAL | 61.5 | 54.3 | 81.6 | 126.6 | 87.3 | 110.6 | 142.2 | 150.4 |



TABLE 10. SUMMARY OF NOX EMISSIONS (1000 TONS) BY FUEL TYPE FOR COLORADO

| FUEL TYPE | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 14.3 | 13.1 | 21.9 | 32.1 | 45.7 | 82.2 | 112.3 | 143.5 |
| ANTHRACITE COAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDUAL OIL | .8 | 1.0 | 1.6 | 1.1 | 1.3 | 3.2 | 3.0 | 2.0 |
| DISTILLATE OIL | 7.1 | 11.6 | 12.3 | 12.8 | 9.0 | 13.7 | 17.9 | 25.1 |
| NATURAL GAS | 28.6 | 45.1 | 43.7 | 46.0 | 31.3 | 42.6 | 38.9 | 37.6 |
| WOOD | .7 | .6 | .5 | .5 | .6 | .7 | 1.2 | 1.3 |
| GASOLINE, DIESEL | 18.6 | 25.5 | 36.7 | 49.2 | 66.0 | 82.3 | 92.4 | 95.9 |
| OTHER(SMELTERS & MISC.) | 11.5 | 8.2 | 7.0 | 9.3 | 11.7 | 5.7 | 4.6 | 4.4 |
| TOTAL | 81.7 | 105.0 | 123.7 | 151.0 | 165.7 | 230.3 | 270.2 | 309.9 |

TABLE 7. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY FUEL TYPE FOR CONNECTICUT

| FUEL TYPE | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 73.3 | 100.7 | 122.5 | 140.3 | 147.6 | 143.7 | 124.4 | 95.5 | 109.6 | 142.6 |
| ANTHRACITE COAL | 20.0 | 27.1 | 29.3 | 30.7 | 31.0 | 23.1 | 8.0 | 6.1 | 10.1 | 10.8 |
| RESIDUAL OIL | .0* | .0* | .0* | .0* | .0* | 14.6 | 12.9 | 12.2 | 18.1 | 17.6 |
| DISTILLATE OIL | .0* | .0* | .0* | .0* | .0* | 1.6 | 2.3 | 3.3 | 4.3 | 5.0 |
| NATURAL GAS | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| WOOD | .1 | .1 | .1 | .1 | .1 | .1 | .1 | .1 | .1 | .1 |
| GASOLINE, DIESEL | .0* | .0* | .0* | .0* | .1* | .3* | .5* | .6* | .9* | .7* |
| OTHER | 6.7* | 11.4* | 13.1* | 13.5* | 8.3* | 10.3 | 11.9 | 10.2 | 8.3 | 10.0 |
| TOTAL | 100.2 | 139.4 | 165.0 | 184.6 | 187.1 | 193.8 | 160.2 | 128.1 | 151.4 | 186.7 |

*- MAY NOT INCLUDE ALL EMISSIONS BECAUSE DATUM WAS NOT AVAILABLE



TABLE 8 . SUMMARY OF NOX EMISSIONS (1000 TONS) BY FUEL TYPE FOR CONNECTICUT

| FUEL TYPE | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 16.0 | 22.0 | 26.9 | 31.3 | 32.9 | 32.8 | 28.0 | 21.4 | 25.7 | 33.0 |
| ANTHRACITE COAL | 10.6 | 14.4 | 15.5 | 16.2 | 16.4 | 12.2 | 4.3 | 3.2 | 5.3 | 5.7 |
| RESIDUAL OIL | .0* | .0* | .0* | .0* | .0* | 3.6 | 3.2 | 3.0 | 5.1 | 4.3 |
| DISTILLATE OIL | .0* | .0* | .0* | .0* | .0* | 2.0 | 2.1 | 2.4 | 2.8 | 5.5 |
| NATURAL GAS | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| WOOD | 1.0 | 1.0 | .9 | .9 | .9 | .8 | .8 | .8 | .7 | .7 |
| GASOLINE, DIESEL | .0* | .0* | .2* | 1.0* | 3.5* | 7.5* | 13.8* | 16.5* | 22.5* | 16.7* |
| OTHER | 5.1* | 5.6* | 6.2* | 6.2* | 6.2* | 7.6 | 9.4 | 7.2 | 5.8 | 9.4 |
| TOTAL | 32.7 | 43.0 | 49.8 | 55.6 | 59.9 | 66.5 | 61.7 | 54.5 | 68.0 | 75.3 |

TABLE 9. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY FUEL TYPE FOR CONNECTICUT

| FUEL TYPE | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 71.7 | 92.6 | 140.4 | 196.5 | 76.6 | .2 | .1 | .1 |
| ANTHRACITE COAL | 12.4 | 5.1 | 1.8 | .7 | .2 | .1 | .1 | .2 |
| RESIDUAL OIL | 59.5 | 42.9 | 66.5 | 80.0 | 184.5 | 47.5 | 52.4 | 42.5 |
| DISTILLATE OIL | 7.1 | 7.2 | 22.5 | 16.0 | 14.9 | 12.8 | 13.6 | 13.1 |
| NATURAL GAS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| WOOD | .1 | .1 | .1 | .1 | .1 | .1 | .2 | .2 |
| GASOLINE, DIESEL | 1.3 | 1.7 | 1.8 | 2.8 | 4.2 | 4.6 | 5.0 | 5.2 |
| OTHER(SMELTERS & MISC.) | 12.2 | 9.4 | 7.0 | 7.9 | 7.1 | 2.0 | 1.4 | 1.0 |
| TOTAL | 164.2 | 159.1 | 240.0 | 304.0 | 287.7 | 67.5 | 72.9 | 62.4 |



TABLE 10. SUMMARY OF NOX EMISSIONS (1000 TONS) BY FUEL TYPE FOR CONNECTICUT

| FUEL TYPE | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 18.6 | 30.1 | 35.9 | 50.7 | 20.8 | .2 | .2 | .1 |
| ANTHRACITE COAL | 6.6 | 2.7 | .9 | .4 | .1 | .1 | .0 | .1 |
| RESIDUAL OIL | 13.5 | 10.0 | 14.2 | 16.6 | 39.6 | 35.3 | 39.6 | 32.8 |
| DISTILLATE OIL | 9.5 | 11.5 | 17.3 | 12.6 | 14.3 | 12.4 | 10.5 | 9.4 |
| NATURAL GAS | .0 | 2.2 | 4.4 | 5.8 | 3.4 | 3.6 | 3.6 | 4.1 |
| WOOD | 1.1 | 1.0 | 1.0 | 1.0 | 1.2 | 1.3 | 1.7 | 2.0 |
| GASOLINE, DIESEL | 26.0 | 34.1 | 40.1 | 54.7 | 90.7 | 99.2 | 95.1 | 90.6 |
| OTHER(SMELTERS & MISC.) | 14.5 | 11.6 | 9.1 | 12.7 | 14.8 | 6.4 | 4.2 | 2.9 |
| TOTAL | 89.7 | 103.3 | 122.9 | 154.5 | 184.9 | 158.4 | 154.9 | 142.1 |

TABLE 7. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY FUEL TYPE FOR DELAWARE

| FUEL TYPE | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| ANTHRACITE COAL | 2.1 | 2.9 | 3.1 | 3.3 | 3.3 | 2.5 | 2.5 | 1.9 | 3.1 | 4.6 |
| RESIDUAL OIL | .0* | .0* | .0* | .0* | .0* | 6.5 | 6.2 | 6.2 | 6.0* | 5.3 |
| DISTILLATE OIL | .0* | .0* | .0* | .0* | .0* | .0 | .1 | .1 | .2 | .2 |
| NATURAL GAS | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| WOOD | .1 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| GASOLINE, DIESEL | .0* | .0* | .0* | .0* | .0* | .0* | .1* | .1* | .1* | .1* |
| OTHER | 2.5* | 2.7* | 2.9* | 3.0* | 3.1* | 3.4* | 3.6* | 3.6* | 3.5* | 4.3* |
| TOTAL | 4.7 | 5.6 | 6.1 | 6.3 | 6.5 | 12.5 | 12.5 | 11.9 | 13.0 | 14.6 |

*- MAY NOT INCLUDE ALL EMISSIONS BECAUSE DATUM WAS NOT AVAILABLE



TABLE 8 . SUMMARY OF NOX EMISSIONS (1000 TONS) BY FUEL TYPE FOR DELAWARE

| FUEL TYPE | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| ANTHRACITE COAL | 1.1 | 1.5 | 1.7 | 1.7 | 1.7 | 1.3 | 1.3 | 1.0 | 1.6 | 2.5 |
| RESIDUAL OIL | .0* | .0* | .0* | .0* | .0* | 1.7 | 1.6 | 1.6 | 1.6* | 1.4 |
| DISTILLATE OIL | .0* | .0* | .0* | .0* | .0* | .1 | .1 | .1 | .3 | .2 |
| NATURAL GAS | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| WOOD | .4 | .4 | .3 | .3 | .3 | .3 | .3 | .3 | .3 | .2 |
| GASOLINE, DIESEL | .0* | .0* | .0* | .1* | .5* | 1.1* | 2.1* | 2.7* | 3.7* | 3.0* |
| OTHER | 1.2* | 1.3* | 1.3* | 1.3* | 1.4* | 1.5* | 2.0* | 1.4* | 1.3* | 2.0* |
| TOTAL | 2.7 | 3.2 | 3.3 | 3.5 | 4.0 | 5.9 | 7.4 | 7.0 | 8.8 | 9.2 |

TABLE 9. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY FUEL TYPE FOR DELAWARE

| FUEL TYPE | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 11.2 | 22.4 | 61.6 | 77.6 | 44.1 | 13.6 | 19.6 | 42.2 |
| ANTHRACITE COAL | 4.1 | 2.3 | 1.5 | .6 | .3 | .2 | .2 | .1 |
| RESIDUAL OIL | 8.9 | 11.9 | 20.0 | 22.4 | 25.1 | 33.8 | 33.3 | 50.5 |
| DISTILLATE OIL | .9 | 1.0 | 2.7 | 2.7 | 2.8 | 3.0 | 3.0 | 2.4 |
| NATURAL GAS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| WOOD | .0 | .0 | .0 | .0 | .0 | .0 | .1 | .1 |
| GASOLINE, DIESEL | .2 | .4 | .4 | .6 | .8 | .8 | 1.1 | 1.4 |
| OTHER(SMELTERS & MISC.) | 5.2 | 5.0 | 4.9 | 5.7 | 6.0 | 4.9 | 5.0 | 4.7 |
| TOTAL | 30.6 | 43.0 | 91.2 | 109.6 | 79.2 | 56.3 | 62.3 | 101.4 |



TABLE 10. SUMMARY OF NOX EMISSIONS (1000 TONS) BY FUEL TYPE FOR DELAWARE

| FUEL TYPE | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 2.5 | 7.1 | 18.0 | 22.6 | 19.5 | 11.4 | 10.0 | 14.9 |
| ANTHRACITE COAL | 2.2 | 1.2 | .8 | .3 | .2 | .1 | .1 | .0 |
| RESIDUAL OIL | 2.5 | 2.9 | 5.5 | 5.6 | 6.8 | 10.8 | 12.9 | 12.0 |
| DISTILLATE OIL | .9 | 1.1 | 2.1 | 1.9 | 2.8 | 3.0 | 3.4 | 5.1 |
| NATURAL GAS | 2.0 | .9 | 1.5 | 3.6 | 2.3 | 1.4 | 1.5 | 3.1 |
| WOOD | .4 | .4 | .4 | .4 | .5 | .6 | .8 | .7 |
| GASOLINE, DIESEL | 5.9 | 8.4 | 10.4 | 14.1 | 17.5 | 19.4 | 21.5 | 22.6 |
| OTHER(SMELTERS & MISC.) | 2.8 | 2.4 | 2.1 | 3.1 | 3.8 | 2.2 | 1.9 | 1.6 |
| TOTAL | 19.2 | 24.4 | 40.8 | 51.5 | 53.3 | 48.9 | 52.1 | 60.1 |

TABLE 7. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY FUEL TYPE FOR DISTRICT OF COLUMBIA

| FUEL TYPE | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 15.3 | 18.8 | 20.0 | 19.7 | 19.8 | 20.6 | 18.1 | 24.1 | 16.8 | 21.9 |
| ANTHRACITE COAL | 2.0 | 2.8 | 3.0 | 3.1 | 3.1 | 2.4 | 3.5 | 2.6 | 4.4 | 4.2 |
| RESIDUAL OIL | .0* | .0* | .0* | .0* | .0* | 5.1 | 4.2 | 3.9 | 4.0 | 1.7 |
| DISTILLATE OIL | .0* | .0* | .0* | .0* | .0* | .1 | .1 | .2 | .4 | .4 |
| NATURAL GAS | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| WOOD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| GASOLINE, DIESEL | .0* | .0* | .0* | .0* | .1* | .1* | .2* | .3* | .4* | .3* |
| OTHER | 2.1* | 2.2* | 2.4* | 2.4* | 2.4* | 3.1 | 3.6 | 3.1* | 2.4* | 3.5* |
| TOTAL | 19.4 | 23.7 | 25.4 | 25.2 | 25.4 | 31.3 | 29.7 | 24.2 | 28.3 | 32.0 |

*- MAY NOT INCLUDE ALL EMISSIONS BECAUSE DATUM WAS NOT AVAILABLE



TABLE 8 . SUMMARY OF NOX EMISSIONS (1000 TONS) BY FUEL TYPE FOR DISTRICT OF COLUMBIA

| FUEL TYPE | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 4.8 | 5.8 | 6.2 | 6.2 | 6.2 | 6.6 | 5.7 | 4.3 | 5.1 | 6.4 |
| ANTHRACITE COAL | 1.1 | 1.5 | 1.6 | 1.6 | 1.7 | 1.2 | 1.8 | 1.4 | 2.3 | 2.2 |
| RESIDUAL OIL | .0* | .0* | .0* | .0* | .0* | .7 | .6 | .5 | .7 | .3 |
| DISTILLATE OIL | .0* | .0* | .0* | .0* | .0* | .3 | .3 | .3 | 1.0 | 1.4 |
| NATURAL GAS | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| WOOD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| GASOLINE, DIESEL | .0* | .0* | .1* | .4* | 1.3* | 2.9* | 5.2* | 7.2* | 10.2* | 6.7* |
| OTHER | 1.4* | 1.5* | 1.7* | 1.7* | 1.7* | 2.1 | 2.5 | 2.1* | 1.7* | 3.3* |
| TOTAL | 7.3 | 8.8 | 9.6 | 9.9 | 10.9 | 13.8 | 16.1 | 15.8 | 21.0 | 20.4 |

TABLE 9. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY FUEL TYPE FOR DISTRICT OF COLUMBIA

| FUEL TYPE | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 39.9* | 34.0* | 30.9* | 17.0* | 55.5* | 8.1 | 1.4 | 1.6 |
| ANTHRACITE COAL | 2.9 | 1.4 | .4 | .3 | .1 | .1 | .1 | .0 |
| RESIDUAL OIL | 1.9 | 1.9 | 10.8 | 30.8 | 65.9 | 13.6 | 6.8 | 1.2 |
| DISTILLATE OIL | .7 | 1.0 | 2.1 | 1.9 | 3.1 | 1.8 | 4.4 | 2.2 |
| NATURAL GAS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| WOOD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| GASOLINE, DIESEL | .5 | .6 | .6 | .8 | .8 | .8 | .9 | .8 |
| OTHER(SMELTERS & MISC.) | 4.9 | 3.4 | 2.1 | 2.1 | 1.8 | .5 | .4 | .3 |
| TOTAL | 50.8 | 42.2 | 46.9 | 52.9 | 127.3 | 24.8 | 14.0 | 6.1 |



TABLE 10. SUMMARY OF NOX EMISSIONS (1000 TONS) BY FUEL TYPE FOR DISTRICT OF COLUMBIA

| FUEL TYPE | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 11.0* | 9.8* | 9.8* | 5.3* | 11.7* | 3.7 | .8 | .8 |
| ANTHRACITE COAL | 1.5 | .7 | .2 | .2 | .1 | .0 | .0 | .0 |
| RESIDUAL OIL | .3 | .4 | 1.4 | 3.7 | 8.1 | 3.7 | 1.7 | .4 |
| DISTILLATE OIL | 2.6 | 3.5 | 1.7 | 1.2 | 4.3 | 2.4 | 7.6 | 3.6 |
| NATURAL GAS | .3 | .8 | 1.3 | 1.3 | 2.0 | 1.9 | 1.9 | 1.4 |
| WOOD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| GASOLINE, DIESEL | 9.2 | 9.4 | 9.8 | 12.6 | 16.1 | 16.3 | 16.8 | 14.6 |
| OTHER(SMELTERS & MISC.) | 5.8 | 4.2 | 2.7 | 3.3 | 3.7 | 1.6 | 1.1 | .8 |
| TOTAL | 30.9 | 28.9 | 27.0 | 27.6 | 45.9 | 29.6 | 29.9 | 21.6 |

TABLE 7. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY FUEL TYPE FOR FLORIDA

| FUEL TYPE | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 11.5 | 23.0 | 36.9 | 51.0 | 61.7 | 55.8 | 54.7 | 49.4 | 64.0 | 101.8 |
| ANTHRACITE COAL | .3 | .3 | .4 | .4 | .4 | .3 | .0* | .0* | .0* | .0* |
| RESIDUAL OIL | .0* | .0* | .0* | .0* | .0* | 45.1 | 42.5 | 37.8 | 45.1 | 80.1 |
| DISTILLATE OIL | .0* | .0* | .0* | .0* | .0* | 1.7 | 1.7 | 1.6 | 2.2 | 3.7 |
| NATURAL GAS | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| WOOD | .3 | .3 | .3 | .3 | .3 | .3 | .2 | .2 | .2 | .2 |
| GASOLINE, DIESEL | .0* | .0* | .0* | .1* | .2* | .5* | .5* | .6* | .9* | .8* |
| OTHER | 46.0* | 50.9* | 56.3* | 60.6* | 63.8* | 71.7 | 87.2 | 86.3* | 79.8* | 107.0 |
| TOTAL | 58.1 | 74.5 | 93.8 | 112.3 | 126.4 | 175.4 | 186.9 | 175.9 | 192.2 | 293.8 |

*- MAY NOT INCLUDE ALL EMISSIONS BECAUSE DATUM WAS NOT AVAILABLE



TABLE 8 . SUMMARY OF NOX EMISSIONS (1000 TONS) BY FUEL TYPE FOR FLORIDA

| FUEL TYPE | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 2.1 | 4.1 | 6.5 | 9.0 | 10.9 | 9.9 | 9.6 | 8.6 | 11.2 | 17.6 |
| ANTHRACITE COAL | .1 | .2 | .2 | .2 | .2 | .2 | .0* | .0* | .0* | .0* |
| RESIDUAL OIL | .0* | .0* | .0* | .0* | .0* | 24.4 | 26.7 | 21.9 | 21.3 | 22.9 |
| DISTILLATE OIL | .0* | .0* | .0* | .0* | .0* | 9.3 | 8.8 | 7.3 | 8.4 | 13.1 |
| NATURAL GAS | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .4* | .6* | 3.4* |
| WOOD | 2.4 | 2.3 | 2.2 | 2.1 | 2.0 | 1.9 | 1.8 | 1.7 | 1.7 | 1.6 |
| GASOLINE, DIESEL | .0* | .0* | .3* | 1.7* | 5.8* | 12.5* | 13.5* | 15.5* | 23.3* | 21.5* |
| OTHER | 48.1* | 48.8* | 49.7* | 50.0* | 50.1* | 52.5 | 298.5 | 282.5* | 114.8* | 139.9 |
| TOTAL | 52.7 | 55.4 | 58.9 | 63.0 | 69.0 | 110.6 | 358.8 | 338.0 | 181.2 | 220.0 |

TABLE 9. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY FUEL TYPE FOR FLORIDA

| FUEL TYPE | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 46.3 | 42.1 | 74.1 | 120.1 | 157.8 | 213.9 | 222.5 | 344.7 |
| ANTHRACITE COAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDUAL OIL | 90.4 | 173.1 | 141.8 | 226.8 | 328.2 | 421.2 | 403.2 | 463.7 |
| DISTILLATE OIL | 5.8 | 9.4 | 8.0 | 7.8 | 8.5 | 10.9 | 12.0 | 9.2 |
| NATURAL GAS | .0 | .0 | .0 | .1 | .1 | .1 | .1 | .1 |
| WOOD | .2 | .2 | .2 | .2 | .2 | .2 | .3 | .3 |
| GASOLINE, DIESEL | 2.6 | 4.0 | 5.0 | 6.5 | 10.8 | 16.1 | 19.3 | 21.9 |
| OTHER(SMELTERS & MISC.) | 133.4 | 138.4 | 143.6 | 165.7 | 180.8 | 160.7 | 167.0 | 157.0 |
| TOTAL | 278.9 | 367.2 | 372.6 | 527.1 | 686.5 | 823.1 | 824.4 | 997.0 |



TABLE 10. SUMMARY OF NOX EMISSIONS (1000 TONS) BY FUEL TYPE FOR FLORIDA

| FUEL TYPE | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 7.1 | 7.8 | 17.9 | 30.4 | 61.8 | 65.0 | 63.7 | 92.1 |
| ANTHRACITE COAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDUAL OIL | 18.5 | 35.2 | 30.9 | 45.5 | 63.6 | 91.9 | 107.2 | 115.0 |
| DISTILLATE OIL | 16.3 | 24.4 | 20.9 | 24.5 | 28.5 | 25.8 | 33.1 | 27.1 |
| NATURAL GAS | 5.6 | 10.5 | 35.7 | 51.0 | 62.9 | 53.5 | 56.4 | 64.4 |
| WOOD | 2.5 | 2.4 | 2.4 | 2.7 | 3.5 | 3.5 | 4.6 | 4.9 |
| GASOLINE, DIESEL | 51.9 | 80.3 | 112.7 | 143.5 | 235.5 | 343.2 | 366.2 | 378.0 |
| OTHER(SMELTERS & MISC.) | 114.1 | 90.3 | 42.6 | 43.8 | 51.1 | 32.7 | 24.3 | 20.8 |
| TOTAL | 215.9 | 250.9 | 263.0 | 341.3 | 506.8 | 615.7 | 655.5 | 702.3 |

TABLE 7. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY FUEL TYPE FOR GEORGIA

| FUEL TYPE | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 61.8 | 88.6 | 112.2 | 133.4 | 148.1 | 149.0 | 134.2 | 102.3 | 109.6 | 145.6 |
| ANTHRACITE COAL | .5 | .7 | .7 | .8 | .8 | .6 | .0* | .0* | .0* | .0* |
| RESIDUAL OIL | .0* | .0* | .0* | .0* | .0* | 9.5 | 9.0 | 8.5 | 9.9 | 16.6 |
| DISTILLATE OIL | .0* | .0* | .0* | .0* | .0* | .2 | .3 | .3 | .6 | 1.2 |
| NATURAL GAS | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| WOOD | .8 | .8 | .7 | .7 | .7 | .6 | .6 | .6 | .6 | .5 |
| GASOLINE, DIESEL | .0* | .0* | .0* | .0* | .1* | .3* | .5* | .6* | .9* | .9* |
| OTHER | 24.0* | 26.0* | 28.2* | 28.8* | 29.3* | 31.3* | 34.5* | 32.5 | 32.1 | 34.2 |
| TOTAL | 87.2 | 116.1 | 141.9 | 163.7 | 179.0 | 191.6 | 179.0 | 144.9 | 153.6 | 199.0 |

*- MAY NOT INCLUDE ALL EMISSIONS BECAUSE DATUM WAS NOT AVAILABLE



TABLE 8 . SUMMARY OF NOX EMISSIONS (1000 TONS) BY FUEL TYPE FOR GEORGIA

| FUEL TYPE | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 12.1 | 17.3 | 21.8 | 25.7 | 28.8 | 29.6 | 25.6 | 19.2 | 20.4 | 25.9 |
| ANTHRACITE COAL | .3 | .4 | .4 | .4 | .4 | .3 | .0* | .0* | .0* | .0* |
| RESIDUAL OIL | .0* | .0* | .0* | .0* | .0* | 3.4 | 3.6 | 3.1 | 3.4 | 8.0 |
| DISTILLATE OIL | .0* | .0* | .0* | .0* | .0* | .5 | .5 | .5 | .7 | 2.0 |
| NATURAL GAS | .0* | .0* | .0* | .0* | .0* | .0* | .3* | 3.5* | 5.1* | 13.9* |
| WOOD | 6.1 | 5.8 | 5.6 | 5.3 | 5.1 | 4.9 | 4.6 | 4.4 | 4.3 | 4.0 |
| GASOLINE, DIESEL | .0* | .0* | .2* | 1.1* | 3.8* | 8.2* | 13.1* | 15.7* | 23.1* | 22.7* |
| OTHER | 53.4* | 54.5* | 55.7* | 55.9* | 56.0* | 57.1* | 100.3* | 65.6 | 74.1 | 33.5 |
| TOTAL | 72.0 | 78.0 | 83.7 | 88.5 | 94.1 | 103.9 | 147.9 | 112.0 | 131.1 | 109.9 |

TABLE 9. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY FUEL TYPE FOR GEORGIA

| FUEL TYPE | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 108.2 | 127.0 | 142.3 | 248.8 | 304.4 | 553.1 | 581.5 | 731.6 |
| ANTHRACITE COAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDUAL OIL | 23.2 | 26.1 | 25.5 | 35.8 | 62.8 | 65.5 | 73.7 | 39.1 |
| DISTILLATE OIL | 4.3 | 5.6 | 4.2 | 3.9 | 4.5 | 6.3 | 6.7 | 6.0 |
| NATURAL GAS | .0 | .1 | .1 | .1 | .1 | .1 | .1 | .1 |
| WOOD | .8 | .7 | .6 | .5 | .4 | .4 | .5 | .5 |
| GASOLINE, DIESEL | 2.1 | 2.9 | 3.6 | 6.0 | 10.0 | 12.1 | 14.6 | 14.9 |
| OTHER(SMELTERS & MISC.) | 40.0 | 35.7 | 33.2 | 35.2 | 35.4 | 27.0 | 27.6 | 25.7 |
| TOTAL | 178.6 | 198.0 | 209.5 | 330.2 | 417.6 | 664.5 | 704.7 | 817.9 |



TABLE 10. SUMMARY OF NOX EMISSIONS (1000 TONS) BY FUEL TYPE FOR GEORGIA

| FUEL TYPE | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 18.7 | 26.0 | 37.2 | 66.4 | 92.3 | 172.9 | 198.2 | 233.5 |
| ANTHRACITE COAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDUAL OIL | 4.7 | 6.0 | 7.1 | 7.8 | 10.7 | 9.4 | 12.9 | 10.0 |
| DISTILLATE OIL | 11.1 | 16.5 | 15.1 | 15.4 | 19.2 | 23.3 | 23.8 | 26.1 |
| NATURAL GAS | 24.3 | 41.8 | 40.8 | 47.5 | 39.1 | 32.1 | 21.4 | 31.2 |
| WOOD | 6.5 | 5.9 | 5.4 | 5.5 | 5.2 | 5.7 | 7.2 | 7.4 |
| GASOLINE, DIESEL | 49.3 | 69.2 | 88.0 | 124.4 | 188.3 | 235.2 | 253.0 | 233.7 |
| OTHER(SMELTERS & MISC.) | 82.9 | 41.2 | 27.1 | 30.4 | 34.7 | 22.2 | 21.2 | 18.4 |
| TOTAL | 197.5 | 206.7 | 220.7 | 297.4 | 389.6 | 500.7 | 537.7 | 560.4 |

TABLE 7. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY FUEL TYPE FOR IDAHO

| FUEL TYPE | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 12.8 | 19.2 | 25.2 | 30.5 | 32.8 | 28.6 | 25.9 | 20.9 | 22.9 | 32.0 |
| ANTHRACITE COAL | .0 | .0 | .0 | .0 | .0 | .0 | .0* | .0* | .0* | .0* |
| RESIDUAL OIL | .0* | .0* | .0* | .0* | .0* | .5 | .5 | .6 | .5 | 1.2* |
| DISTILLATE OIL | .0* | .0* | .0* | .0* | .0* | .5* | .5* | .5* | .5* | .9* |
| NATURAL GAS | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| WOOD | .1 | .1 | .1 | .1 | .1 | .1 | .1 | .1 | .1 | .1 |
| GASOLINE, DIESEL | .0* | .0* | .0* | .0* | .0* | .1* | .1* | .2* | .2* | .2* |
| OTHER | 29.5* | 41.8* | 45.6* | 59.9* | 42.7* | 48.4* | 55.3* | 43.8 | 71.5* | 52.8* |
| TOTAL | 42.4 | 61.1 | 71.0 | 90.6 | 75.6 | 78.2 | 82.5 | 66.1 | 95.8 | 87.2 |

*- MAY NOT INCLUDE ALL EMISSIONS BECAUSE DATUM WAS NOT AVAILABLE



TABLE 8 . SUMMARY OF NOX EMISSIONS (1000 TONS) BY FUEL TYPE FOR IDAHO

| FUEL TYPE | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 3.9 | 5.9 | 7.7 | 9.2 | 9.8 | 8.2 | 7.1 | 5.7 | 6.3 | 8.5 |
| ANTHRACITE COAL | .0 | .0 | .0 | .0 | .0 | .0 | .0* | .0* | .0* | .0* |
| RESIDUAL OIL | .0* | .0* | .0* | .0* | .0* | .1 | .1 | .1 | .1 | .2* |
| DISTILLATE OIL | .0* | .0* | .0* | .0* | .0* | 2.9* | 2.7* | 2.3* | 2.6* | 3.8* |
| NATURAL GAS | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| WOOD | 1.0 | .9 | .9 | .9 | .8 | .8 | .7 | .7 | .7 | .6 |
| GASOLINE, DIESEL | .0* | .0* | .0* | .2* | .8* | 1.8* | 3.1* | 3.8* | 5.6* | 5.5* |
| OTHER | 1.8* | 2.2* | 2.7* | 2.7* | 2.7* | 3.1* | 2.8* | 3.0 | 2.7* | 5.2* |
| TOTAL | 6.7 | 9.0 | 11.3 | 13.0 | 14.1 | 16.9 | 16.6 | 15.5 | 17.9 | 23.8 |

TABLE 9. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY FUEL TYPE FOR IDAHO

| FUEL TYPE | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 23.0 | 13.6 | 10.9 | 13.8 | 5.1 | 7.2 | 6.6 | 7.8 |
| ANTHRACITE COAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDUAL OIL | 2.8 | 7.2 | 1.0 | 1.6 | 1.5 | 3.3 | 5.0 | 3.1 |
| DISTILLATE OIL | 3.1 | 2.3 | 4.2 | 3.7 | 3.7 | 4.9 | 5.0 | 2.7 |
| NATURAL GAS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .1 |
| WOOD | .1 | .1 | .1 | .1 | .1 | .1 | .1 | .1 |
| GASOLINE, DIESEL | .8 | 1.0 | 1.2 | 1.6 | 1.7 | 2.3 | 3.1 | 2.4 |
| OTHER(SMELTERS & MISC.) | 75.6 | 78.1 | 41.7 | 118.2 | 23.2 | 13.0 | 13.2 | 11.8 |
| TOTAL | 105.4 | 102.3 | 59.0 | 139.1 | 35.4 | 30.7 | 32.9 | 28.0 |

TABLE 10. SUMMARY OF NOX EMISSIONS (1000 TONS) BY FUEL TYPE FOR IDAHO

| FUEL TYPE | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 6.8 | 4.4 | 4.0 | 5.8 | 2.9 | 4.6 | 4.0 | 4.7 |
| ANTHRACITE COAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDUAL OIL | .5 | .9 | .1 | .2 | .2 | .4 | .8 | .4 |
| DISTILLATE OIL | 3.7 | 5.1 | 3.2 | 4.1 | 7.0 | 9.8 | 10.6 | 10.5 |
| NATURAL GAS | .0 | .0 | 6.2 | 8.3 | 7.9 | 8.7 | 8.0 | 52.9 |
| WOOD | 1.0 | .9 | .9 | .8 | .8 | .8 | 1.3 | 1.4 |
| GASOLINE, DIESEL | 14.6 | 18.8 | 22.7 | 29.0 | 31.6 | 40.0 | 49.1 | 37.4 |
| OTHER(SMELTERS & MISC.) | 5.0 | 4.0 | 5.5 | 4.2 | 5.2 | 3.4 | 2.3 | 3.5 |
| TOTAL | 31.6 | 34.1 | 42.6 | 52.3 | 55.7 | 67.7 | 76.1 | 110.8 |

TABLE 7. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY FUEL TYPE FOR ILLINOIS

| FUEL TYPE | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 1354.1 | 1871.9 | 2312.3 | 2727.2 | 2798.2 | 2749.1 | 2549.5 | 2067.4 | 2435.6 | 3306.7 |
| ANTHRACITE COAL | 33.5 | 45.4 | 49.0 | 51.4 | 51.8 | 38.7 | 3.3 | 2.5 | 4.1 | 8.3 |
| RESIDUAL OIL | .0* | .0* | .0* | .0* | .0* | 28.0 | 27.3 | 26.9 | 25.6 | 45.8 |
| DISTILLATE OIL | .0* | .0* | .0* | .0* | .0* | 2.0 | 2.0 | 2.1 | 3.2 | 5.6 |
| NATURAL GAS | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| WOOD | .4 | .3 | .3 | .3 | .3 | .3 | .3 | .3 | .2 | .2 |
| GASOLINE, DIESEL | .0* | .0* | .0* | .2* | .6* | 1.4* | 2.3* | 2.5* | 3.4* | 2.7* |
| OTHER | 71.0* | 94.0* | 126.0* | 169.8* | 112.8* | 148.0 | 155.3 | 129.7 | 151.1 | 174.5 |
| TOTAL | 1459.0 | 2011.6 | 2487.7 | 2948.9 | 2963.7 | 2967.4 | 2740.0 | 2231.3 | 2623.3 | 3543.7 |

*- MAY NOT INCLUDE ALL EMISSIONS BECAUSE DATUM WAS NOT AVAILABLE



TABLE 8 . SUMMARY OF NOX EMISSIONS (1000 TONS) BY FUEL TYPE FOR ILLINOIS

| FUEL TYPE | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 156.4 | 216.0 | 266.5 | 313.5 | 320.2 | 312.5 | 277.4 | 220.5 | 269.9 | 353.6 |
| ANTHRACITE COAL | 17.7 | 24.0 | 25.9 | 27.2 | 27.4 | 20.5 | 1.7 | 1.3 | 2.2 | 4.4 |
| RESIDUAL OIL | .0* | .0* | .0* | .0* | .0* | 9.0 | 9.2 | 8.6 | 7.5 | 12.9 |
| DISTILLATE OIL | .0* | .0* | .0* | .0* | .0* | 7.2 | 6.8 | 5.8 | 6.4 | 12.5 |
| NATURAL GAS | .0* | .0* | 3.3* | 1.2* | 1.6* | 2.3* | 5.6* | 21.9* | 31.0* | 38.5* |
| WOOD | 2.7 | 2.5 | 2.4 | 2.3 | 2.2 | 2.1 | 2.0 | 1.9 | 1.9 | 1.7 |
| GASOLINE, DIESEL | .0* | .1* | .9* | 4.6* | 16.1* | 34.5* | 57.8* | 63.0* | 87.5* | 68.1* |
| OTHER | 29.1* | 31.4* | 34.0* | 34.3* | 34.6* | 40.7 | 45.2 | 39.9 | 35.6 | 51.9 |
| TOTAL | 205.9 | 274.0 | 333.0 | 383.1 | 402.1 | 428.8 | 405.8 | 363.0 | 441.8 | 543.6 |

TABLE 9. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY FUEL TYPE FOR ILLINOIS

| FUEL TYPE | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 2398.3 | 2256.7 | 1948.5 | 2259.7 | 2306.8 | 1950.6 | 1440.8 | 1331.8 |
| ANTHRACITE COAL | 3.1 | 1.7 | 1.4 | 1.9 | 1.7 | .5 | 1.0 | 1.0 |
| RESIDUAL OIL | 59.9 | 66.3 | 126.8 | 113.9 | 161.8 | 134.8 | 114.6 | 110.4 |
| DISTILLATE OIL | 14.1 | 15.3 | 43.8 | 35.4 | 35.0 | 31.8 | 34.5 | 16.4 |
| NATURAL GAS | .1 | .1 | .2 | .2 | .4 | .3 | .4 | .3 |
| WOOD | .3 | .3 | .2 | .2 | .2 | .3 | .4 | .5 |
| GASOLINE, DIESEL | 5.5 | 7.2 | 7.9 | 11.5 | 16.4 | 19.1 | 21.8 | 21.7 |
| OTHER(SMELTERS & MISC.) | 184.2 | 188.4 | 156.6 | 150.0 | 136.8 | 100.8 | 103.9 | 97.1 |
| TOTAL | 2665.6 | 2536.1 | 2285.4 | 2572.8 | 2659.1 | 2238.2 | 1717.4 | 1579.2 |



TABLE 10. SUMMARY OF NOX EMISSIONS (1000 TONS) BY FUEL TYPE FOR ILLINOIS

| FUEL TYPE | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 290.5 | 321.4 | 377.8 | 444.7 | 416.0 | 438.5 | 415.7 | 455.2 |
| ANTHRACITE COAL | 1.6 | .9 | .8 | 1.0 | .9 | .3 | .6 | .5 |
| RESIDUAL OIL | 15.0 | 16.2 | 21.1 | 17.0 | 23.7 | 25.5 | 31.1 | 31.5 |
| DISTILLATE OIL | 40.2 | 42.7 | 77.9 | 69.4 | 75.9 | 85.0 | 77.8 | 63.1 |
| NATURAL GAS | 78.6 | 115.0 | 102.3 | 125.8 | 126.2 | 85.5 | 86.4 | 82.7 |
| WOOD | 2.8 | 2.5 | 2.3 | 2.5 | 2.9 | 3.1 | 4.6 | 5.0 |
| GASOLINE, DIESEL | 120.8 | 150.0 | 176.1 | 229.0 | 326.1 | 362.7 | 368.6 | 341.7 |
| OTHER(SMELTERS & MISC.) | 73.8 | 66.6 | 60.1 | 71.0 | 78.6 | 48.6 | 43.6 | 37.9 |
| TOTAL | 623.4 | 715.2 | 818.4 | 960.2 | 1050.4 | 1049.2 | 1028.3 | 1017.5 |

TABLE 7. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY FUEL TYPE FOR INDIANA

| FUEL TYPE | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 416.8 | 635.8 | 854.3 | 1073.1 | 1237.3 | 1309.3 | 1201.1 | 950.1 | 1098.8 | 1450.2 |
| ANTHRACITE COAL | 6.1 | 8.3 | 8.9 | 9.4 | 9.4 | 7.1 | 1.0 | .8 | 1.3 | 1.4 |
| RESIDUAL OIL | .0* | .0* | .0* | .0* | .0* | 27.8 | 26.9 | 26.3 | 32.1 | 51.9 |
| DISTILLATE OIL | .0* | .0* | .0* | .0* | .0* | .4 | .4 | .5 | .8 | 1.7 |
| NATURAL GAS | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| WOOD | .3 | .3 | .3 | .3 | .3 | .2 | .2 | .2 | .2 | .2 |
| GASOLINE, DIESEL | .0* | .0* | .0* | .1* | .3* | .7* | 1.0* | 1.1* | 1.5* | 1.4* |
| OTHER | 27.6* | 31.9* | 37.3* | 44.5* | 38.7* | 55.6 | 45.5 | 42.0 | 50.2 | 71.5 |
| TOTAL | 450.8 | 676.3 | 900.8 | 1127.3 | 1286.0 | 1401.1 | 1276.2 | 1021.1 | 1185.0 | 1578.2 |

*- MAY NOT INCLUDE ALL EMISSIONS BECAUSE DATUM WAS NOT AVAILABLE



TABLE 8 . SUMMARY OF NOX EMISSIONS (1000 TONS) BY FUEL TYPE FOR INDIANA

| FUEL TYPE | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 53.1 | 80.7 | 108.3 | 136.4 | 159.5 | 175.7 | 159.2 | 124.9 | 148.7 | 191.8 |
| ANTHRACITE COAL | 3.2 | 4.4 | 4.7 | 4.9 | 5.0 | 3.7 | .5 | .4 | .7 | .7 |
| RESIDUAL OIL | .0* | .0* | .0* | .0* | .0* | 8.9 | 8.9 | 8.3 | 9.1 | 15.8 |
| DISTILLATE OIL | .0* | .0* | .0* | .0* | .0* | .9 | .8 | .7 | 1.0 | 3.3 |
| NATURAL GAS | .0* | .0* | 1.1* | .8* | 1.2* | .7* | 1.0* | 7.2* | 10.2* | 14.3* |
| WOOD | 2.3 | 2.2 | 2.1 | 2.0 | 1.9 | 1.8 | 1.7 | 1.6 | 1.6 | 1.5 |
| GASOLINE, DIESEL | .0* | .1* | .4* | 2.3* | 7.9* | 17.1* | 26.5* | 29.2* | 39.6* | 36.2* |
| OTHER | 14.8* | 15.4* | 16.1* | 16.2* | 16.3* | 18.1 | 23.3 | 17.9 | 17.5 | 24.0 |
| TOTAL | 73.4 | 102.7 | 132.7 | 162.6 | 191.8 | 226.8 | 222.0 | 190.4 | 228.4 | 287.6 |

TABLE 9. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY FUEL TYPE FOR INDIANA

| FUEL TYPE | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 1066.0 | 1082.4 | 1193.3 | 1503.4 | 1897.8 | 1921.2 | 1623.9 | 1930.4 |
| ANTHRACITE COAL | .0 | .0 | .7 | 1.3 | 1.1 | .3 | .2 | .0 |
| RESIDUAL OIL | 66.4 | 59.1 | 63.7 | 63.2 | 54.7 | 72.9 | 91.4 | 77.1 |
| DISTILLATE OIL | 7.5 | 11.5 | 27.0 | 21.9 | 21.3 | 19.4 | 24.1 | 13.5 |
| NATURAL GAS | .0 | .0 | .1 | .1 | .2 | .1 | .1 | .1 |
| WOOD | .3 | .3 | .2 | .2 | .2 | .2 | .3 | .4 |
| GASOLINE, DIESEL | 3.2 | 4.3 | 4.7 | 6.7 | 10.4 | 12.5 | 13.8 | 19.5 |
| OTHER(SMELTERS & MISC.) | 47.9 | 45.0 | 42.8 | 46.0 | 46.9 | 36.9 | 37.9 | 35.3 |
| TOTAL | 1191.3 | 1202.7 | 1332.6 | 1642.7 | 2032.6 | 2063.5 | 1791.8 | 2076.4 |



TABLE 10. SUMMARY OF NOX EMISSIONS (1000 TONS) BY FUEL TYPE FOR INDIANA

| FUEL TYPE | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 148.4 | 172.3 | 204.0 | 261.8 | 328.0 | 370.8 | 370.8 | 439.5 |
| ANTHRACITE COAL | .0 | .0 | .4 | .7 | .6 | .2 | .1 | .0 |
| RESIDUAL OIL | 16.9 | 14.9 | 13.5 | 13.2 | 9.7 | 13.6 | 17.7 | 15.4 |
| DISTILLATE OIL | 10.3 | 25.0 | 33.3 | 29.4 | 30.7 | 32.1 | 39.3 | 36.6 |
| NATURAL GAS | 18.4 | 33.3 | 48.4 | 77.2 | 51.8 | 42.0 | 32.4 | 40.4 |
| WOOD | 2.5 | 2.1 | 1.8 | 1.7 | 1.8 | 2.0 | 3.2 | 3.8 |
| GASOLINE, DIESEL | 76.0 | 101.9 | 116.7 | 147.7 | 204.3 | 231.3 | 237.8 | 304.1 |
| OTHER(SMELTERS & MISC.) | 33.2 | 29.2 | 25.9 | 31.8 | 36.0 | 22.1 | 19.8 | 17.1 |
| TOTAL | 305.6 | 378.6 | 443.9 | 563.5 | 662.9 | 714.1 | 721.1 | 856.8 |

TABLE 7. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY FUEL TYPE FOR IOWA

| FUEL TYPE | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 435.7 | 578.9 | 682.5 | 777.4 | 757.6 | 688.4 | 614.3 | 466.6 | 507.7 | 641.5 |
| ANTHRACITE COAL | 3.2 | 4.3 | 4.6 | 4.8 | 4.9 | 3.6 | .0* | .0* | .0* | .0* |
| RESIDUAL OIL | .0* | .0* | .0* | .0* | .0* | 2.8 | 2.4 | 2.3 | 1.6 | 2.7 |
| DISTILLATE OIL | .0* | .0* | .0* | .0* | .0* | .4* | .4* | .4* | 1.2* | 2.8 |
| NATURAL GAS | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| WOOD | .1 | .1 | .1 | .1 | .1 | .1 | .1 | .1 | .1 | .0 |
| GASOLINE, DIESEL | .0* | .0* | .0* | .1* | .3* | .5* | .9* | .9* | 1.2* | 1.0* |
| OTHER | 18.7* | 18.9* | 19.1* | 19.4* | 19.5* | 20.8 | 21.8 | 21.1 | 20.3 | 21.2 |
| TOTAL | 457.6 | 602.1 | 706.3 | 801.8 | 782.3 | 716.6 | 639.8 | 491.4 | 531.9 | 669.3 |

*- MAY NOT INCLUDE ALL EMISSIONS BECAUSE DATUM WAS NOT AVAILABLE



TABLE 8 . SUMMARY OF NOX EMISSIONS (1000 TONS) BY FUEL TYPE FOR IOWA

| FUEL TYPE | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 43.5 | 57.8 | 68.1 | 77.4 | 73.8 | 63.9 | 53.7 | 40.9 | 46.8 | 58.0 |
| ANTHRACITE COAL | 1.7 | 2.3 | 2.4 | 2.6 | 2.6 | 1.9 | .0* | .0* | .0* | .0* |
| RESIDUAL OIL | .0* | .0* | .0* | .0* | .0* | .5 | .4 | .4 | .3 | .5 |
| DISTILLATE OIL | .0* | .0* | .0* | .0* | .0* | .9* | .9* | .8* | 2.3* | 7.6 |
| NATURAL GAS | .0* | .0* | .0* | .0* | .0* | .0* | .0* | 5.0* | 7.2* | 9.6* |
| WOOD | .5 | .5 | .5 | .5 | .5 | .4 | .4 | .4 | .4 | .4 |
| GASOLINE, DIESEL | .0* | .1* | .4* | 1.8* | 6.5* | 13.9* | 22.1* | 23.9* | 30.2* | 26.5* |
| OTHER | 11.5* | 11.5* | 11.5* | 11.5* | 11.5* | 12.3 | 12.8 | 12.3 | 11.6 | 15.4 |
| TOTAL | 57.2 | 72.1 | 82.9 | 93.7 | 94.8 | 93.9 | 90.3 | 83.6 | 98.7 | 118.0 |

TABLE 9. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY FUEL TYPE FOR IOWA

| FUEL TYPE | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 491.0 | 375.8 | 339.8 | 392.6 | 350.8 | 286.2 | 367.6 | 312.4 |
| ANTHRACITE COAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .5 |
| RESIDUAL OIL | 2.4 | 1.6 | 4.1 | 2.6 | 1.7 | 2.0 | 2.8 | 1.9 |
| DISTILLATE OIL | 5.5 | 6.2 | 12.1 | 8.8 | 8.2 | 7.2 | 7.5 | 5.0 |
| NATURAL GAS | .0 | .1 | .1 | .1 | .1 | .1 | .1 | .1 |
| WOOD | .1 | .1 | .1 | .0 | .0 | .0 | .1 | .1 |
| GASOLINE, DIESEL | 2.0 | 2.4 | 3.0 | 3.9 | 7.0 | 7.3 | 8.3 | 7.8 |
| OTHER(SMELTERS & MISC.) | 22.1 | 20.0 | 18.1 | 16.9 | 15.6 | 11.0 | 11.2 | 10.4 |
| TOTAL | 523.2 | 406.2 | 377.1 | 424.9 | 383.5 | 313.9 | 397.6 | 338.2 |



TABLE 10. SUMMARY OF NOX EMISSIONS (1000 TONS) BY FUEL TYPE FOR IOWA

| FUEL TYPE | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 50.5 | 42.6 | 51.0 | 60.5 | 69.3 | 77.6 | 122.8 | 143.7 |
| ANTHRACITE COAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .3 |
| RESIDUAL OIL | .5 | .4 | .7 | .4 | .2 | .3 | .3 | .4 |
| DISTILLATE OIL | 18.3 | 23.8 | 14.9 | 11.0 | 13.4 | 17.3 | 15.1 | 13.7 |
| NATURAL GAS | 25.8 | 48.1 | 43.3 | 54.1 | 56.5 | 48.2 | 21.4 | 32.3 |
| WOOD | .6 | .5 | .5 | .4 | .4 | .6 | .7 | .7 |
| GASOLINE, DIESEL | 52.7 | 60.3 | 72.1 | 88.1 | 126.4 | 130.7 | 129.4 | 113.9 |
| OTHER(SMELTERS & MISC.) | 19.5 | 17.0 | 14.7 | 14.9 | 15.0 | 8.8 | 7.7 | 7.3 |
| TOTAL | 167.8 | 192.6 | 197.2 | 229.3 | 281.3 | 283.4 | 297.4 | 312.3 |

TABLE 7. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY FUEL TYPE FOR KANSAS

| FUEL TYPE | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 227.8 | 299.7 | 350.2 | 368.8 | 374.5 | 347.2 | 299.2 | 212.7 | 215.0 | 259.8 |
| ANTHRACITE COAL | .3 | .3 | .4 | .4 | .4 | .3 | .0* | .0* | .0* | .0* |
| RESIDUAL OIL | .0* | .0* | .0* | .0* | .0* | 12.1 | 11.4 | 11.3 | 14.5 | 12.4 |
| DISTILLATE OIL | .0* | .0* | .0* | .0* | .0* | 6.9* | 6.5* | 5.5* | 5.5 | 11.1* |
| NATURAL GAS | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .1* |
| WOOD | .1 | .1 | .1 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| GASOLINE, DIESEL | .0* | .0* | .0* | .1* | .2* | .5* | .7* | .7* | .8* | .7* |
| OTHER | 32.8* | 84.9* | 95.0* | 77.7* | 32.8* | 39.2 | 30.4 | 21.9 | 21.5 | 21.4 |
| TOTAL | 260.9 | 385.0 | 445.6 | 447.0 | 407.9 | 406.1 | 348.3 | 252.2 | 257.4 | 305.5 |

*- MAY NOT INCLUDE ALL EMISSIONS BECAUSE DATUM WAS NOT AVAILABLE



TABLE 8 . SUMMARY OF NOX EMISSIONS (1000 TONS) BY FUEL TYPE FOR KANSAS

| FUEL TYPE | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 23.8 | 31.3 | 37.4 | 39.4 | 39.9 | 37.4 | 31.5 | 22.1 | 22.9 | 26.9 |
| ANTHRACITE COAL | .1 | .2 | .2 | .2 | .2 | .2 | .0* | .0* | .0* | .0* |
| RESIDUAL OIL | .0* | .0* | .0* | .0* | .0* | 2.9 | 2.7 | 2.7 | 3.5 | 2.9 |
| DISTILLATE OIL | .0* | .0* | .0* | .0* | .0* | 43.2* | 40.6* | 33.4* | 32.8 | 65.2* |
| NATURAL GAS | .0* | .0* | 36.1* | 18.0* | 13.1* | 24.8* | 31.0* | 21.4* | 30.3* | 58.4* |
| WOOD | .4 | .4 | .4 | .4 | .3 | .3 | .3 | .3 | .3 | .3 |
| GASOLINE, DIESEL | .0* | .0* | .3* | 1.6* | 5.6* | 12.0* | 18.8* | 18.3* | 21.5* | 19.0* |
| OTHER | 8.3* | 8.9* | 9.5* | 9.6* | 9.7* | 10.3 | 10.8 | 10.4 | 10.0 | 13.1 |
| TOTAL | 32.7 | 40.8 | 83.9 | 69.1 | 68.8 | 131.1 | 135.8 | 108.5 | 121.3 | 185.7 |

TABLE 9. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY FUEL TYPE FOR KANSAS

| FUEL TYPE | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 147.2 | 90.8 | 73.4 | 61.5 | 95.8 | 135.1 | 171.9 | 247.3 |
| ANTHRACITE COAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDUAL OIL | 10.9 | 14.5 | 10.8 | 4.7 | 7.7 | 24.9 | 28.1 | 5.4 |
| DISTILLATE OIL | 7.9 | 6.8 | 4.7 | 5.2 | 4.4 | 5.8 | 7.6 | 6.9 |
| NATURAL GAS | .1 | .1 | .1 | .1 | .2 | .1 | .2 | .1 |
| WOOD | .1 | .1 | .0 | .0 | .0 | .0 | .0 | .0 |
| GASOLINE, DIESEL | 1.7 | 2.1 | 2.3 | 3.2 | 5.2 | 6.0 | 7.2 | 7.1 |
| OTHER(SMELTERS & MISC.) | 23.2 | 21.1 | 19.0 | 19.9 | 18.2 | 14.1 | 14.7 | 13.8 |
| TOTAL | 191.0 | 135.5 | 110.4 | 94.7 | 131.5 | 186.1 | 229.7 | 280.7 |



TABLE 10. SUMMARY OF NOX EMISSIONS (1000 TONS) BY FUEL TYPE FOR KANSAS

| FUEL TYPE | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 17.4 | 12.5 | 11.7 | 10.0 | 15.9 | 40.5 | 88.7 | 149.5 |
| ANTHRACITE COAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDUAL OIL | 2.5 | 3.4 | 2.3 | .9 | 1.3 | 6.6 | 7.6 | 1.2 |
| DISTILLATE OIL | 41.9 | 33.7 | 22.6 | 21.3 | 19.9 | 22.5 | 31.3 | 38.8 |
| NATURAL GAS | 88.6 | 127.5 | 124.1 | 148.2 | 177.9 | 168.1 | 164.2 | 139.7 |
| WOOD | .5 | .4 | .3 | .3 | .3 | .4 | .6 | .6 |
| GASOLINE, DIESEL | 39.8 | 48.5 | 56.7 | 72.1 | 93.4 | 107.4 | 115.9 | 103.4 |
| OTHER(SMELTERS & MISC.) | 16.2 | 15.2 | 14.4 | 18.5 | 18.5 | 12.5 | 15.6 | 16.1 |
| TOTAL | 207.0 | 241.1 | 232.2 | 271.1 | 327.2 | 358.0 | 423.9 | 449.3 |

TABLE 7. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY FUEL TYPE FOR KENTUCKY

| FUEL TYPE | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 185.3 | 249.7 | 298.3 | 338.3 | 367.4 | 393.8 | 378.7 | 309.0 | 368.0 | 510.9 |
| ANTHRACITE COAL | .2 | .3 | .3 | .3 | .3 | .2 | .0* | .0* | .0* | .0* |
| RESIDUAL OIL | .0* | .0* | .0* | .0* | .0* | 2.5* | 2.6* | 2.4* | 3.3* | 3.8 |
| DISTILLATE OIL | .0* | .0* | .0* | .0* | .0* | .2 | .2 | .3 | .5 | 1.2 |
| NATURAL GAS | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| WOOD | .3 | .3 | .3 | .3 | .2 | .2 | .2 | .2 | .2 | .2 |
| GASOLINE, DIESEL | .0* | .0* | .0* | .0* | .1* | .2* | .4* | .5* | .7* | .6* |
| OTHER | 22.0* | 23.2* | 24.4* | 25.1* | 25.5* | 27.6* | 29.8* | 28.5* | 28.0* | 31.5* |
| TOTAL | 207.8 | 273.5 | 323.2 | 364.0 | 393.5 | 424.8 | 411.9 | 340.8 | 400.7 | 548.4 |

*- MAY NOT INCLUDE ALL EMISSIONS BECAUSE DATUM WAS NOT AVAILABLE



TABLE 8 . SUMMARY OF NOX EMISSIONS (1000 TONS) BY FUEL TYPE FOR KENTUCKY

| FUEL TYPE | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 22.9 | 30.9 | 36.9 | 41.8 | 46.0 | 50.3 | 47.6 | 39.6 | 50.3 | 70.2 |
| ANTHRACITE COAL | .1 | .1 | .2 | .2 | .2 | .1 | .0* | .0* | .0* | .0* |
| RESIDUAL OIL | .0* | .0* | .0* | .0* | .0* | 1.5* | 1.7* | 1.4* | 1.6* | 2.1 |
| DISTILLATE OIL | .0* | .0* | .0* | .0* | .0* | .5 | .5 | .4 | 1.2 | 2.9 |
| NATURAL GAS | .0* | .0* | 1.6* | 1.9* | 3.9* | 5.0* | 3.7* | 2.6* | 3.8* | 5.1* |
| WOOD | 2.2 | 2.1 | 2.0 | 1.9 | 1.8 | 1.7 | 1.6 | 1.6 | 1.5 | 1.4 |
| GASOLINE, DIESEL | .0* | .0* | .2* | .8* | 2.8* | 5.9* | 9.9* | 11.9* | 17.5* | 16.6* |
| OTHER | 12.7* | 13.1* | 13.6* | 13.7* | 13.7* | 14.7* | 27.9* | 13.9* | 22.2* | 22.3* |
| TOTAL | 37.9 | 46.2 | 54.4 | 60.3 | 68.4 | 79.8 | 93.0 | 71.5 | 98.1 | 120.6 |

TABLE 9. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY FUEL TYPE FOR KENTUCKY

| FUEL TYPE | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 351.8 | 496.8 | 529.5 | 810.5 | 1309.5 | 1329.0 | 1308.7 | 1129.5 |
| ANTHRACITE COAL | .0 | .0 | .6 | 1.0 | .0 | .0 | .0 | 1.5 |
| RESIDUAL OIL | 4.9 | 3.1 | 1.4 | 2.5 | 4.0 | 12.7 | 11.1 | 5.2 |
| DISTILLATE OIL | 2.4 | 3.5 | 5.8 | 5.9 | 6.1 | 5.6 | 8.7 | 11.2 |
| NATURAL GAS | .0 | .0 | .0 | .0 | .1 | .1 | .1 | .1 |
| WOOD | .3 | .3 | .2 | .2 | .2 | .2 | .3 | .4 |
| GASOLINE, DIESEL | 1.8 | 2.2 | 2.3 | 3.1 | 5.0 | 7.2 | 9.9 | 10.5 |
| OTHER(SMELTERS & MISC.) | 35.4 | 33.6 | 32.2 | 32.5 | 32.6 | 26.5 | 27.4 | 25.9 |
| TOTAL | 396.7 | 539.5 | 572.1 | 855.8 | 1357.5 | 1381.2 | 1366.2 | 1184.3 |



TABLE 10. SUMMARY OF NOX EMISSIONS (1000 TONS) BY FUEL TYPE FOR KENTUCKY

| FUEL TYPE | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 50.5 | 88.2 | 107.6 | 166.4 | 245.5 | 309.5 | 294.2 | 308.0 |
| ANTHRACITE COAL | .0 | .0 | .3 | .5 | .0 | .0 | .0 | .8 |
| RESIDUAL OIL | 1.3 | 1.0 | .3 | .6 | 1.0 | 2.6 | 2.5 | 1.1 |
| DISTILLATE OIL | 4.9 | 9.6 | 16.3 | 16.5 | 14.8 | 18.4 | 29.2 | 39.2 |
| NATURAL GAS | 18.7 | 36.2 | 45.9 | 54.5 | 61.2 | 41.4 | 41.1 | 38.1 |
| WOOD | 2.4 | 2.0 | 1.7 | 1.6 | 1.8 | 2.3 | 2.8 | 3.4 |
| GASOLINE, DIESEL | 41.9 | 52.9 | 61.3 | 79.2 | 113.0 | 146.9 | 170.0 | 159.0 |
| OTHER(SMELTERS & MISC.) | 28.3 | 25.5 | 20.6 | 20.3 | 21.0 | 12.9 | 12.0 | 16.7 |
| TOTAL | 148.0 | 215.4 | 254.1 | 339.6 | 458.3 | 534.1 | 551.8 | 566.2 |

TABLE 7. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY FUEL TYPE FOR LOUISIANA

| FUEL TYPE | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 97.5 | 139.7 | 176.2 | 206.5 | 208.1 | 170.1 | 137.5 | 97.3 | 97.8 | 119.1 |
| ANTHRACITE COAL | .2 | .2 | .2 | .2 | .2 | .2 | .0* | .0* | .0* | .0* |
| RESIDUAL OIL | .0* | .0* | .0* | .0* | .0* | 37.2* | 43.2* | 37.4* | 36.0* | 50.0* |
| DISTILLATE OIL | .0* | .0* | .0* | .0* | .0* | 6.3 | 6.0 | 5.2 | 4.8 | 7.7 |
| NATURAL GAS | .0* | .0* | .0* | .0* | .0* | .0* | .1* | .0* | .1* | .1* |
| WOOD | .4 | .4 | .3 | .3 | .3 | .3 | .3 | .3 | .3 | .2 |
| GASOLINE, DIESEL | .0* | .0* | .0* | .0* | .1* | .3* | .4* | .4* | .6* | .6* |
| OTHER | 42.5* | 46.7* | 51.3* | 54.7* | 57.2* | 63.0* | 68.2* | 68.1* | 68.0* | 86.7* |
| TOTAL | 140.5 | 186.9 | 228.0 | 261.8 | 266.0 | 277.3 | 255.7 | 208.7 | 207.6 | 264.4 |

*- MAY NOT INCLUDE ALL EMISSIONS BECAUSE DATUM WAS NOT AVAILABLE



TABLE 8 . SUMMARY OF NOX EMISSIONS (1000 TONS) BY FUEL TYPE FOR LOUISIANA

| FUEL TYPE | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 9.9 | 14.1 | 17.8 | 21.0 | 20.4 | 15.9 | 12.2 | 8.5 | 8.7 | 10.3 |
| ANTHRACITE COAL | .1 | .1 | .1 | .1 | .1 | .1 | .0* | .0* | .0* | .0* |
| RESIDUAL OIL | .0* | .0* | .0* | .0* | .0* | 43.9 | 51.6 | 41.5 | 39.0 | 27.8 |
| DISTILLATE OIL | .0* | .0* | .0* | .0* | .0* | 39.1 | 36.8 | 30.2 | 26.1 | 32.1 |
| NATURAL GAS | .0* | .0* | .0* | 13.2* | 25.9* | 86.6* | 97.9* | 53.8* | 75.5* | 135.2* |
| WOOD | 2.8 | 2.6 | 2.5 | 2.4 | 2.3 | 2.2 | 2.1 | 2.0 | 1.9 | 1.8 |
| GASOLINE, DIESEL | .0* | .0* | .2* | .9* | 3.1* | 6.8* | 10.7* | 10.8* | 15.4* | 16.3* |
| OTHER | 29.9* | 31.7* | 33.8* | 35.1* | 36.0* | 38.7 | 59.8 | 52.2 | 40.4 | 53.2 |
| TOTAL | 42.6 | 48.6 | 54.4 | 72.7 | 87.9 | 233.3 | 271.1 | 199.0 | 207.0 | 276.7 |

TABLE 9. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY FUEL TYPE FOR LOUISIANA

| FUEL TYPE | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 47.7 | 24.0 | 10.3 | 9.9 | 5.9 | 5.4 | 14.1 | 35.9 |
| ANTHRACITE COAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDUAL OIL | 19.4* | 18.2* | 13.4* | 11.0* | 23.6* | 79.9 | 158.2 | 236.1 |
| DISTILLATE OIL | 4.9 | 5.9 | 4.6 | 3.5 | 4.3 | 9.4 | 11.6 | 8.4 |
| NATURAL GAS | .2 | .3 | .3 | .4 | .6 | .5 | .6 | .5 |
| WOOD | .3 | .2 | .2 | .2 | .2 | .2 | .2 | .2 |
| GASOLINE, DIESEL | 1.9 | 2.9 | 3.8 | 3.7 | 6.2 | 7.6 | 11.7 | 9.6 |
| OTHER(SHELTERS & MISC.) | 105.8 | 110.8 | 116.5 | 128.4 | 138.4 | 126.1 | 132.0 | 124.5 |
| TOTAL | 180.2 | 162.2 | 149.2 | 157.0 | 179.2 | 229.0 | 328.4 | 415.3 |

TABLE 10. SUMMARY OF NOX EMISSIONS (1000 TONS) BY FUEL TYPE FOR LOUISIANA

| FUEL TYPE | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 4.1 | 2.9 | 2.0 | 2.1 | 1.4 | 1.4 | 3.6 | 35.2 |
| ANTHRACITE COAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDUAL OIL | 11.2 | 12.1 | 10.4 | 8.7 | 13.2 | 31.9 | 63.2 | 64.6 |
| DISTILLATE OIL | 18.9 | 15.9 | 16.6 | 15.5 | 16.4 | 36.4 | 41.4 | 31.1 |
| NATURAL GAS | 192.2 | 290.1 | 446.9 | 612.8 | 606.7 | 613.8 | 965.2 | 516.7 |
| WOOD | 2.8 | 2.9 | 2.8 | 2.8 | 3.0 | 3.0 | 3.4 | 3.2 |
| GASOLINE, DIESEL | 40.4 | 59.3 | 75.9 | 84.8 | 117.6 | 138.1 | 177.8 | 144.0 |
| OTHER(SHELTERS & MISC.) | 64.2 | 64.9 | 72.0 | 87.8 | 101.9 | 88.9 | 94.0 | 85.7 |
| TOTAL | 333.7 | 448.1 | 626.6 | 814.4 | 860.1 | 913.5 | 1348.6 | 880.5 |

TABLE 7. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY FUEL TYPE FOR MAINE

| FUEL TYPE | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 26.0 | 40.2 | 54.3 | 68.3 | 74.0 | 67.6 | 57.5 | 44.1 | 49.0 | 64.4 |
| ANTHRACITE COAL | 20.0 | 27.1 | 29.3 | 30.7 | 31.0 | 23.1 | 8.0 | 6.1 | 10.1 | 10.8 |
| RESIDUAL OIL | .0* | .0* | .0* | .0* | .0* | 7.6 | 7.1 | 6.9 | 7.5 | 8.4 |
| DISTILLATE OIL | .0* | .0* | .0* | .0* | .0* | .4 | .7 | 1.1 | 1.6 | 1.5 |
| NATURAL GAS | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| WOOD | .3 | .3 | .3 | .3 | .2 | .2 | .2 | .2 | .2 | .2 |
| GASOLINE, DIESEL | .0* | .0* | .0* | .0* | .1* | .1* | .2* | .3* | .4* | .3* |
| OTHER | 8.8* | 9.4* | 10.0* | 10.4* | 10.6* | 11.3 | 11.9 | 11.9 | 11.9 | 13.9 |
| TOTAL | 55.2 | 77.0 | 93.9 | 109.6 | 115.9 | 110.4 | 85.7 | 70.6 | 80.7 | 99.5 |

*- MAY NOT INCLUDE ALL EMISSIONS BECAUSE DATUM WAS NOT AVAILABLE



TABLE 8 . SUMMARY OF NOX EMISSIONS (1000 TONS) BY FUEL TYPE FOR MAINE

| FUEL TYPE | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 7.2 | 11.1 | 15.0 | 19.1 | 20.5 | 19.0 | 15.7 | 11.8 | 13.2 | 16.4 |
| ANTHRACITE COAL | 10.6 | 14.4 | 15.5 | 16.2 | 16.4 | 12.2 | 4.3 | 3.2 | 5.3 | 5.7 |
| RESIDUAL OIL | .0* | .0* | .0* | .0* | .0* | 1.9 | 1.8 | 1.7 | 1.8 | 4.2 |
| DISTILLATE OIL | .0* | .0* | .0* | .0* | .0* | .3 | .4 | .5 | .8 | 1.0 |
| NATURAL GAS | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| WOOD | 2.2 | 2.1 | 2.0 | 1.9 | 1.8 | 1.7 | 1.6 | 1.6 | 1.5 | 1.4 |
| GASOLINE, DIESEL | .0* | .0* | .1* | .5* | 1.6* | 3.5* | 6.3* | 7.1* | 9.2* | 7.7* |
| OTHER | 3.9* | 4.0* | 4.1* | 4.2* | 4.2* | 4.4 | 5.1 | 4.7 | 4.3 | 5.8 |
| TOTAL | 23.9 | 31.6 | 36.7 | 41.9 | 44.5 | 43.0 | 35.2 | 30.6 | 36.2 | 42.3 |

TABLE 9. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY FUEL TYPE FOR MAINE

| FUEL TYPE | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 14.6 | 4.2 | 2.8 | 6.7 | 3.1 | 2.6 | 2.1 | 4.0 |
| ANTHRACITE COAL | 3.7 | 2.3 | 3.4 | 1.5 | .2 | .0 | .1 | .2 |
| RESIDUAL OIL | 17.6 | 21.0 | 28.0 | 37.7 | 59.7 | 50.5 | 47.1 | 37.8 |
| DISTILLATE OIL | 3.5 | 4.2 | 6.8 | 7.6 | 8.2 | 7.2 | 8.5 | 6.4 |
| NATURAL GAS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| WOOD | .2 | .2 | .2 | .2 | .1 | .2 | .2 | .3 |
| GASOLINE, DIESEL | .6 | .8 | .8 | 1.1 | 1.6 | 1.9 | 2.3 | 2.3 |
| OTHER(SMELTERS & MISC.) | 15.9 | 15.8 | 15.9 | 16.7 | 17.3 | 15.1 | 15.8 | 14.9 |
| TOTAL | 56.2 | 48.5 | 58.0 | 71.5 | 90.4 | 77.4 | 76.0 | 66.0 |

TABLE 10. SUMMARY OF NOX EMISSIONS (1000 TONS) BY FUEL TYPE FOR MAINE

| FUEL TYPE | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 2.9 | .9 | .7 | 1.8 | .8 | .7 | .6 | 1.5 |
| ANTHRACITE COAL | 2.0 | 1.2 | 1.8 | .8 | .1 | .0 | .0 | .1 |
| RESIDUAL OIL | 3.8 | 4.6 | 5.7 | 7.3 | 12.1 | 10.3 | 11.5 | 9.5 |
| DISTILLATE OIL | 4.0 | 6.1 | 6.7 | 6.6 | 8.3 | 7.2 | 7.2 | 5.4 |
| NATURAL GAS | .0 | .0 | .0 | .0 | .1 | .1 | .1 | .3 |
| WOOD | 2.3 | 2.2 | 2.1 | 2.2 | 2.1 | 2.4 | 3.3 | 3.6 |
| GASOLINE, DIESEL | 16.2 | 20.2 | 23.3 | 28.0 | 35.2 | 39.8 | 42.7 | 38.5 |
| OTHER(SMELTERS & MISC.) | 7.7 | 6.4 | 5.7 | 6.4 | 6.4 | 4.1 | 3.9 | 3.5 |
| TOTAL | 38.8 | 41.6 | 46.1 | 53.0 | 65.2 | 64.5 | 69.4 | 62.3 |

TABLE 7. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY FUEL TYPE FOR MARYLAND

| FUEL TYPE | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 83.0 | 111.4 | 132.2 | 146.9 | 149.4 | 137.8 | 127.2 | 110.3 | 139.5 | 200.7 |
| ANTHRACITE COAL | 12.9 | 17.5 | 18.9 | 19.8 | 20.0 | 14.9 | 7.1 | 5.4 | 8.9 | 12.2 |
| RESIDUAL OIL | .0* | .0* | .0* | .0* | .0* | 40.0 | 41.7 | 37.7 | 45.1 | 64.5 |
| DISTILLATE OIL | .0* | .0* | .0* | .0* | .0* | .4 | .5 | .7 | .9 | 2.1 |
| NATURAL GAS | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| WOOD | .2 | .2 | .2 | .2 | .2 | .2 | .2 | .2 | .2 | .2 |
| GASOLINE, DIESEL | .0* | .0* | .0* | .0* | .1* | .2* | .4* | .5* | .7* | .6* |
| OTHER | 15.3* | 16.4* | 17.5* | 18.2* | 18.8* | 21.0 | 22.8 | 21.9* | 21.0* | 26.5* |
| TOTAL | 111.5 | 145.6 | 168.9 | 185.2 | 188.5 | 214.5 | 199.9 | 176.6 | 216.2 | 306.8 |

*- MAY NOT INCLUDE ALL EMISSIONS BECAUSE DATUM WAS NOT AVAILABLE



TABLE 8 . SUMMARY OF NOX EMISSIONS (1000 TONS) BY FUEL TYPE FOR MARYLAND

| FUEL TYPE | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 19.6 | 26.2 | 31.2 | 35.0 | 35.1 | 32.4 | 29.3 | 25.2 | 33.1 | 46.5 |
| ANTHRACITE COAL | 6.8 | 9.3 | 10.0 | 10.5 | 10.6 | 7.9 | 3.7 | 2.8 | 4.7 | 6.5 |
| RESIDUAL OIL | .0* | .0* | .0* | .0* | .0* | 29.2 | 33.3 | 27.4 | 33.5 | 52.8 |
| DISTILLATE OIL | .0* | .0* | .0* | .0* | .0* | .8 | .8 | .7 | 1.2 | 2.8 |
| NATURAL GAS | .0* | .0* | .0* | .0* | .1* | .0* | .0* | 1.9* | 2.8* | 1.0* |
| WOOD | 1.8 | 1.8 | 1.7 | 1.6 | 1.5 | 1.5 | 1.4 | 1.3 | 1.3 | 1.2 |
| GASOLINE, DIESEL | .0* | .0* | .2* | .8* | 2.9* | 6.3* | 10.9* | 12.8* | 18.1* | 16.4* |
| OTHER | 7.5* | 7.8* | 8.2* | 8.3* | 8.3* | 9.3 | 11.7 | 8.8* | 8.1* | 12.6* |
| TOTAL | 35.8 | 45.1 | 51.3 | 56.2 | 58.5 | 87.3 | 91.0 | 81.0 | 102.7 | 139.8 |

TABLE 9. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY FUEL TYPE FOR MARYLAND

| FUEL TYPE | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 148.4 | 137.1 | 174.4 | 307.1 | 321.8 | 154.6 | 171.6 | 254.4 |
| ANTHRACITE COAL | 8.5 | 5.7 | 4.2 | 3.9 | 1.5 | .2 | .1 | .2 |
| RESIDUAL OIL | 44.9 | 44.4 | 62.4 | 52.2 | 99.7 | 109.0 | 109.3 | 57.7 |
| DISTILLATE OIL | 2.8 | 4.5 | 11.0 | 12.9 | 13.4 | 12.1 | 12.0 | 12.1 |
| NATURAL GAS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| WOOD | .2 | .2 | .2 | .1 | .2 | .2 | .3 | .3 |
| GASOLINE, DIESEL | 1.4 | 2.0 | 2.4 | 4.0 | 5.0 | 6.2 | 7.2 | 7.8 |
| OTHER(SMELTERS & MISC.) | 32.6 | 30.6 | 29.2 | 34.0 | 35.8 | 27.9 | 28.5 | 26.4 |
| TOTAL | 238.8 | 224.5 | 283.8 | 414.1 | 477.4 | 310.3 | 329.0 | 359.0 |

TABLE 10. SUMMARY OF NOX EMISSIONS (1000 TONS) BY FUEL TYPE FOR MARYLAND

| FUEL TYPE | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 33.9 | 32.7 | 46.5 | 83.2 | 82.2 | 50.3 | 60.6 | 85.0 |
| ANTHRACITE COAL | 4.5 | 3.0 | 2.2 | 2.0 | .8 | .1 | .1 | .1 |
| RESIDUAL OIL | 15.1 | 15.0 | 16.4 | 12.8 | 23.0 | 27.9 | 31.6 | 18.5 |
| DISTILLATE OIL | 6.9 | 12.1 | 15.1 | 19.8 | 22.3 | 20.2 | 17.8 | 17.0 |
| NATURAL GAS | 1.6 | 6.0 | 9.5 | 14.4 | 12.7 | 10.0 | 9.2 | 14.9 |
| WOOD | 1.9 | 1.8 | 1.8 | 2.0 | 2.3 | 2.3 | 3.0 | 3.4 |
| GASOLINE, DIESEL | 32.7 | 45.4 | 57.4 | 82.0 | 113.3 | 137.9 | 140.2 | 136.6 |
| OTHER(SMELTERS & MISC.) | 19.1 | 15.5 | 12.4 | 19.4 | 23.7 | 12.3 | 9.8 | 8.2 |
| TOTAL | 115.6 | 131.5 | 161.4 | 235.6 | 280.4 | 261.0 | 272.3 | 283.7 |

TABLE 7. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY FUEL TYPE FOR MASSACHUSETTS

| FUEL TYPE | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 184.9 | 242.0 | 280.0 | 304.8 | 308.3 | 299.6 | 252.7 | 188.2 | 205.9 | 254.5 |
| ANTHRACITE COAL | 20.0 | 27.1 | 29.3 | 30.7 | 31.0 | 23.1 | 8.0 | 6.1 | 10.1 | 10.8 |
| RESIDUAL OIL | .0* | .0* | .0* | .0* | .0* | 54.0 | 52.9 | 49.6 | 52.2 | 58.8 |
| DISTILLATE OIL | .0* | .0* | .0* | .0* | .0* | 4.3 | 6.6 | 10.0 | 13.5 | 12.2 |
| NATURAL GAS | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| WOOD | .4 | .4 | .4 | .3 | .3 | .3 | .3 | .3 | .3 | .3 |
| GASOLINE, DIESEL | .0* | .0* | .0* | .1* | .4* | .9* | 1.3* | 1.4* | 1.7* | 1.3* |
| OTHER | 20.7* | 22.7* | 24.9* | 24.9* | 24.9* | 28.6 | 31.5 | 28.4 | 24.9 | 26.5 |
| TOTAL | 226.0 | 292.3 | 334.6 | 360.8 | 364.9 | 410.8 | 353.3 | 284.0 | 308.6 | 364.5 |

*- MAY NOT INCLUDE ALL EMISSIONS BECAUSE DATUM WAS NOT AVAILABLE



TABLE 8 . SUMMARY OF NOX EMISSIONS (1000 TONS) BY FUEL TYPE FOR MASSACHUSETTS

| FUEL TYPE | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 49.1 | 64.5 | 75.1 | 82.9 | 83.9 | 82.5 | 67.7 | 48.9 | 54.0 | 63.4 |
| ANTHRACITE COAL | 10.6 | 14.4 | 15.5 | 16.2 | 16.4 | 12.2 | 4.3 | 3.2 | 5.3 | 5.7 |
| RESIDUAL OIL | .0* | .0* | .0* | .0* | .0* | 25.1 | 27.3 | 23.3 | 22.1 | 37.4 |
| DISTILLATE OIL | .0* | .0* | .0* | .0* | .0* | 2.6 | 3.4 | 4.7 | 6.3 | 7.8 |
| NATURAL GAS | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| WOOD | 3.0 | 2.8 | 2.7 | 2.6 | 2.5 | 2.3 | 2.2 | 2.1 | 2.1 | 1.9 |
| GASOLINE, DIESEL | .0* | .1* | .6* | 3.1* | 10.8* | 23.2* | 32.6* | 36.1* | 44.1* | 32.9* |
| OTHER | 14.8* | 16.1* | 17.6* | 17.6* | 17.7* | 20.2 | 23.3 | 20.2 | 17.6 | 24.8 |
| TOTAL | 77.4 | 97.9 | 111.5 | 122.4 | 131.2 | 168.2 | 160.8 | 138.6 | 151.6 | 173.9 |

TABLE 9. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY FUEL TYPE FOR MASSACHUSETTS

| FUEL TYPE | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 70.2 | 87.6 | 108.1 | 135.8 | 27.6 | 8.5 | 2.1 | 11.5 |
| ANTHRACITE COAL | 29.9 | 14.6 | 3.7 | 1.5 | .7 | .2 | .2 | 1.0 |
| RESIDUAL OIL | 130.9 | 119.6 | 197.3 | 271.4 | 487.8 | 221.3 | 351.1 | 299.1 |
| DISTILLATE OIL | 16.2 | 14.1 | 41.6 | 42.6 | 37.2 | 34.1 | 35.7 | 22.2 |
| NATURAL GAS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .1 |
| WOOD | .3 | .2 | .2 | .2 | .3 | .3 | .3 | .4 |
| GASOLINE, DIESEL | 2.6 | 3.2 | 3.4 | 4.6 | 6.3 | 6.7 | 8.3 | 9.0 |
| OTHER(SMELTERS & MISC.) | 28.6 | 23.2 | 18.5 | 16.5 | 13.3 | 4.4 | 3.7 | 2.9 |
| TOTAL | 278.7 | 262.5 | 372.9 | 472.6 | 573.2 | 275.6 | 401.6 | 346.1 |



TABLE 10. SUMMARY OF NOX EMISSIONS (1000 TONS) BY FUEL TYPE FOR MASSACHUSETTS

| FUEL TYPE | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 17.4 | 29.8 | 40.2 | 52.7 | 6.5 | 4.2 | .6 | 5.0 |
| ANTHRACITE COAL | 15.8 | 7.7 | 1.9 | .8 | .4 | .1 | .1 | .5 |
| RESIDUAL OIL | 26.8 | 25.2 | 35.0 | 42.5 | 82.3 | 66.8 | 75.2 | 60.1 |
| DISTILLATE OIL | 16.6 | 16.7 | 28.9 | 30.2 | 28.5 | 26.9 | 24.2 | 16.4 |
| NATURAL GAS | .0 | 9.7 | 10.3 | 14.2 | 8.7 | 9.1 | 9.5 | 11.5 |
| WOOD | 3.0 | 3.1 | 3.1 | 3.5 | 4.1 | 3.6 | 4.8 | 5.3 |
| GASOLINE, DIESEL | 54.0 | 65.1 | 76.3 | 95.3 | 139.9 | 150.9 | 165.6 | 159.6 |
| OTHER(SMELTERS & MISC.) | 34.1 | 29.0 | 24.2 | 27.0 | 28.1 | 14.0 | 10.8 | 9.0 |
| TOTAL | 167.7 | 186.3 | 220.0 | 266.3 | 298.5 | 275.5 | 290.8 | 267.4 |

TABLE 7. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY FUEL TYPE FOR MICHIGAN

| FUEL TYPE | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 203.1 | 326.1 | 455.4 | 600.8 | 702.8 | 794.2 | 762.0 | 626.9 | 770.0 | 1027.5 |
| ANTHRACITE COAL | 8.5 | 11.6 | 12.5 | 13.1 | 13.2 | 9.9 | 2.5 | 1.9 | 3.2 | 3.7 |
| RESIDUAL OIL | .0* | .0* | .0* | .0* | .0* | 26.4 | 25.1 | 24.8 | 22.1 | 21.8 |
| DISTILLATE OIL | .0* | .0* | .0* | .0* | .0* | .8 | .8 | .9 | 2.0 | 3.3 |
| NATURAL GAS | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| WOOD | .5 | .4 | .4 | .4 | .4 | .4 | .3 | .3 | .3 | .3 |
| GASOLINE, DIESEL | .0* | .0* | .0* | .1* | .5* | 1.1* | 1.8* | 1.9* | 2.7* | 2.2* |
| OTHER | 168.6* | 266.8* | 264.2* | 272.5* | 173.2* | 172.4* | 175.1* | 115.6 | 130.1 | 105.5 |
| TOTAL | 380.7 | 604.9 | 732.6 | 886.9 | 890.0 | 1005.2 | 967.7 | 772.3 | 930.3 | 1164.3 |

*- MAY NOT INCLUDE ALL EMISSIONS BECAUSE DATUM WAS NOT AVAILABLE



TABLE 8 . SUMMARY OF NOX EMISSIONS (1000 TONS) BY FUEL TYPE FOR MICHIGAN

| FUEL TYPE | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 36.8 | 58.7 | 81.7 | 107.7 | 127.7 | 148.5 | 140.6 | 115.4 | 144.0 | 187.9 |
| ANTHRACITE COAL | 4.5 | 6.1 | 6.6 | 6.9 | 7.0 | 5.2 | 1.3 | 1.0 | 1.7 | 2.0 |
| RESIDUAL OIL | .0* | .0* | .0* | .0* | .0* | 6.8 | 6.6 | 6.4 | 6.3 | 5.9 |
| DISTILLATE OIL | .0* | .0* | .0* | .0* | .0* | 1.1 | 1.1 | 1.0 | 1.7 | 4.0 |
| NATURAL GAS | .0* | .0* | .0* | .7* | .0* | .0* | 1.0* | 3.9* | 5.7* | 10.9* |
| WOOD | 3.5 | 3.3 | 3.2 | 3.0 | 2.9 | 2.7 | 2.6 | 2.5 | 2.4 | 2.3 |
| GASOLINE, DIESEL | .0* | .1* | .7* | 3.6* | 12.7* | 27.4* | 45.3* | 48.4* | 67.9* | 56.4* |
| OTHER | 28.7* | 29.6* | 30.7* | 30.7* | 30.8* | 36.6* | 31.4* | 20.6 | 15.1 | 28.1 |
| TOTAL | 73.5 | 97.8 | 122.9 | 152.6 | 181.1 | 228.4 | 230.0 | 199.2 | 244.8 | 297.3 |

TABLE 9. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY FUEL TYPE FOR MICHIGAN

| FUEL TYPE | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 799.3 | 809.1 | 906.6 | 1258.8 | 1501.2 | 1194.5 | 946.3 | 756.6 |
| ANTHRACITE COAL | 6.0 | 2.2 | 1.0 | 1.7 | 1.4 | 1.0 | .8 | .5 |
| RESIDUAL OIL | 44.6 | 53.6 | 51.3 | 36.3 | 54.4 | 57.3 | 71.8 | 33.7 |
| DISTILLATE OIL | 11.3 | 12.8 | 38.4 | 29.1 | 25.8 | 27.1 | 28.2 | 15.0 |
| NATURAL GAS | .0 | .1 | .1 | .2 | .2 | .3 | .2 | .3 |
| WOOD | .5 | .4 | .3 | .3 | .3 | .3 | .4 | .6 |
| GASOLINE, DIESEL | 4.5 | 5.9 | 6.2 | 9.1 | 12.9 | 14.5 | 18.1 | 15.6 |
| OTHER(SMELTERS & MISC.) | 112.4 | 162.4 | 170.7 | 205.1 | 199.3 | 125.2 | 94.5 | 82.9 |
| TOTAL | 978.6 | 1046.5 | 1174.7 | 1540.6 | 1795.4 | 1420.1 | 1160.5 | 905.1 |



TABLE 10. SUMMARY OF NOX EMISSIONS (1000 TONS) BY FUEL TYPE FOR MICHIGAN

| FUEL TYPE | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 148.7 | 164.5 | 219.1 | 308.6 | 350.4 | 295.0 | 284.3 | 315.6 |
| ANTHRACITE COAL | 3.2 | 1.2 | .5 | .9 | .7 | .5 | .4 | .3 |
| RESIDUAL OIL | 11.3 | 14.0 | 11.0 | 8.0 | 11.1 | 21.4 | 27.3 | 14.0 |
| DISTILLATE OIL | 14.0 | 17.9 | 27.0 | 25.5 | 27.4 | 35.5 | 33.2 | 24.4 |
| NATURAL GAS | 20.6 | 30.8 | 58.9 | 88.5 | 69.1 | 81.8 | 69.5 | 75.9 |
| WOOD | 3.7 | 3.2 | 2.9 | 2.8 | 2.7 | 2.7 | 4.2 | 5.0 |
| GASOLINE, DIESEL | 103.3 | 133.8 | 151.6 | 203.8 | 292.2 | 317.7 | 343.7 | 282.1 |
| OTHER(SMELTERS & MISC.) | 46.9 | 37.4 | 28.7 | 39.1 | 45.3 | 19.8 | 13.0 | 9.7 |
| TOTAL | 351.8 | 402.8 | 499.8 | 677.2 | 798.9 | 774.5 | 775.5 | 726.9 |

TABLE 7. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY FUEL TYPE FOR MINNESOTA

| FUEL TYPE | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 168.3 | 245.4 | 315.5 | 381.1 | 416.9 | 409.3 | 369.5 | 277.9 | 288.3 | 361.4 |
| ANTHRACITE COAL | 17.0 | 23.0 | 24.9 | 26.1 | 26.3 | 19.6 | .8 | .6 | 1.0 | 1.7 |
| RESIDUAL OIL | .0* | .0* | .0* | .0* | .0* | 2.5 | 2.4 | 2.4 | 2.2 | 3.3 |
| DISTILLATE OIL | .0* | .0* | .0* | .0* | .0* | .4 | .4 | .5 | 1.1 | 1.6 |
| NATURAL GAS | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| WOOD | .4 | .3 | .3 | .3 | .3 | .3 | .3 | .3 | .3 | .2 |
| GASOLINE, DIESEL | .0* | .0* | .0* | .1* | .3* | .6* | .8* | .9* | 1.2* | 1.0* |
| OTHER | 16.7* | 18.2* | 19.9* | 20.3* | 20.5* | 23.0* | 24.8* | 23.1 | 21.5 | 24.5 |
| TOTAL | 202.3 | 287.0 | 360.5 | 427.8 | 464.2 | 455.6 | 399.0 | 305.6 | 315.5 | 393.7 |

*- MAY NOT INCLUDE ALL EMISSIONS BECAUSE DATUM WAS NOT AVAILABLE



TABLE 8 . SUMMARY OF NOX EMISSIONS (1000 TONS) BY FUEL TYPE FOR MINNESOTA

| FUEL TYPE | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 21.0 | 30.6 | 39.4 | 47.7 | 52.4 | 51.8 | 46.5 | 35.1 | 37.3 | 46.8 |
| ANTHRACITE COAL | 9.0 | 12.2 | 13.1 | 13.8 | 13.9 | 10.4 | .4 | .3 | .5 | .9 |
| RESIDUAL OIL | .0* | .0* | .0* | .0* | .0* | .5 | .5 | .5 | .5 | .6 |
| DISTILLATE OIL | .0* | .0* | .0* | .0* | .0* | 1.0 | 1.0 | .9 | 2.3 | 4.0 |
| NATURAL GAS | .0* | .0* | .0* | .0* | .0* | .0* | .0* | 4.0* | 5.6* | 12.1* |
| WOOD | 2.7 | 2.6 | 2.5 | 2.4 | 2.2 | 2.1 | 2.0 | 1.9 | 1.9 | 1.8 |
| GASOLINE, DIESEL | .0* | .1* | .4* | 1.9* | 6.6* | 14.2* | 21.3* | 23.2* | 30.7* | 25.2* |
| OTHER | 16.7* | 17.6* | 18.5* | 18.6* | 18.6* | 20.1* | 20.0* | 13.5 | 14.6 | 17.2 |
| TOTAL | 49.4 | 63.0 | 73.9 | 84.3 | 93.7 | 100.1 | 91.7 | 79.3 | 93.4 | 108.5 |

TABLE 9. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY FUEL TYPE FOR MINNESOTA

| FUEL TYPE | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 174.8 | 128.2 | 198.8 | 230.7 | 325.9 | 234.1 | 160.3 | 139.9 |
| ANTHRACITE COAL | .7 | 2.0 | .2 | .6 | .5 | .2 | .1 | .0 |
| RESIDUAL OIL | 7.2 | 5.6 | 32.6 | 26.3 | 33.0 | 27.3 | 20.7 | 12.1 |
| DISTILLATE OIL | 4.0 | 6.1 | 16.8 | 15.8 | 17.6 | 14.8 | 15.4 | 9.8 |
| NATURAL GAS | .0 | .0 | .1 | .1 | .1 | .1 | .1 | .1 |
| WOOD | .4 | .3 | .3 | .2 | .2 | .2 | .3 | .4 |
| GASOLINE, DIESEL | 2.1 | 2.8 | 3.5 | 4.6 | 6.5 | 7.8 | 9.6 | 9.4 |
| OTHER(SMELTERS & MISC.) | 27.9 | 25.3 | 23.0 | 23.7 | 23.1 | 16.4 | 16.6 | 15.4 |
| TOTAL | 217.2 | 170.4 | 275.1 | 302.0 | 406.9 | 300.9 | 223.2 | 187.1 |

TABLE 10. SUMMARY OF NOX EMISSIONS (1000 TONS) BY FUEL TYPE FOR MINNESOTA

| FUEL TYPE | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 25.0 | 20.5 | 31.9 | 37.6 | 52.4 | 67.8 | 85.9 | 90.4 |
| ANTHRACITE COAL | .4 | 1.1 | .1 | .3 | .2 | .1 | .0 | .0 |
| RESIDUAL OIL | 1.7 | 1.3 | 6.5 | 4.8 | 5.3 | 5.3 | 4.5 | 3.6 |
| DISTILLATE OIL | 11.1 | 13.5 | 26.2 | 22.7 | 24.2 | 24.9 | 20.8 | 19.8 |
| NATURAL GAS | 20.1 | 33.9 | 32.5 | 45.6 | 39.4 | 37.4 | 22.8 | 28.9 |
| WOOD | 2.9 | 2.4 | 2.0 | 1.8 | 1.8 | 2.0 | 2.9 | 3.5 |
| GASOLINE, DIESEL | 49.9 | 64.5 | 82.1 | 100.2 | 134.1 | 153.1 | 165.7 | 150.4 |
| OTHER(SMELTERS & MISC.) | 23.4 | 21.7 | 20.6 | 21.3 | 22.9 | 13.7 | 10.9 | 12.1 |
| TOTAL | 134.6 | 158.9 | 202.0 | 234.2 | 280.4 | 304.4 | 313.5 | 308.6 |

TABLE 7. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY FUEL TYPE FOR MISSISSIPPI

| FUEL TYPE | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 50.3 | 75.9 | 99.6 | 119.9 | 132.3 | 116.2 | 107.4 | 91.8 | 114.0 | 173.9 |
| ANTHRACITE COAL | .0 | .0 | .0 | .0 | .0 | .0 | .0* | .0* | .0* | .0* |
| RESIDUAL OIL | .0* | .0* | .0* | .0* | .0* | 1.7 | 2.0 | 2.6 | .5 | 2.2 |
| DISTILLATE OIL | .0* | .0* | .0* | .0* | .0* | .2 | .3 | .3 | .5 | .8 |
| NATURAL GAS | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| WOOD | .6 | .5 | .5 | .5 | .5 | .5 | .4 | .4 | .4 | .4 |
| GASOLINE, DIESEL | .0* | .0* | .0* | .0* | .1* | .2* | .3* | .3* | .5* | .5* |
| OTHER | 30.1* | 32.8* | 35.7* | 37.6* | 39.0* | 42.1 | 44.7 | 46.6 | 47.3 | 55.2 |
| TOTAL | 81.0 | 109.3 | 135.8 | 158.1 | 171.9 | 160.9 | 155.1 | 142.1 | 163.3 | 233.0 |

*- MAY NOT INCLUDE ALL EMISSIONS BECAUSE DATUM WAS NOT AVAILABLE



TABLE 8 . SUMMARY OF NOX EMISSIONS (1000 TONS) BY FUEL TYPE FOR MISSISSIPPI

| FUEL TYPE | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 9.2 | 13.9 | 18.2 | 22.1 | 23.8 | 20.3 | 18.4 | 16.2 | 21.4 | 33.0 |
| ANTHRACITE COAL | .0 | .0 | .0 | .0 | .0 | .0 | .0* | .0* | .0* | .0* |
| RESIDUAL OIL | .0* | .0* | .0* | .0* | .0* | .3 | .3 | .4 | .2 | .7 |
| DISTILLATE OIL | .0* | .0* | .0* | .0* | .0* | .8 | .7 | .7 | 1.4 | 1.7 |
| NATURAL GAS | .0* | .0* | .0* | .0* | .0* | .0* | .6* | 3.8* | 5.4* | 13.0* |
| WOOD | 4.3 | 4.1 | 3.9 | 3.8 | 3.6 | 3.4 | 3.2 | 3.1 | 3.0 | 2.8 |
| GASOLINE, DIESEL | .0* | .0* | .1* | .6* | 2.2* | 4.7* | 7.8* | 7.7* | 12.4* | 13.2* |
| OTHER | 34.4* | 35.2* | 36.1* | 36.4* | 36.5* | 37.4 | 42.4 | 88.6 | 99.2 | 62.9 |
| TOTAL | 48.0 | 53.2 | 58.4 | 62.9 | 66.1 | 66.9 | 73.5 | 120.5 | 143.0 | 127.3 |

TABLE 9. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY FUEL TYPE FOR MISSISSIPPI

| FUEL TYPE | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 58.0* | 19.6 | 6.3 | 3.1 | 37.6 | 52.6 | 78.2 | 105.7 |
| ANTHRACITE COAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDUAL OIL | .7 | 1.0 | 2.0 | 1.3 | 6.7 | 76.4 | 159.0 | 79.0 |
| DISTILLATE OIL | 1.7 | 2.1 | 1.0 | .7 | 1.6 | 5.9 | 6.2 | 2.1 |
| NATURAL GAS | .0 | .1 | .1 | .1 | .1 | .1 | .1 | .1 |
| WOOD | .6 | .5 | .4 | .3 | .2 | .2 | .2 | .2 |
| GASOLINE, DIESEL | 1.4 | 1.8 | 2.2 | 2.7 | 4.8 | 5.2 | 7.3 | 6.7 |
| OTHER(SMELTERS & MISC.) | 64.0 | 66.0 | 68.5 | 72.9 | 77.6 | 70.7 | 74.2 | 70.1 |
| TOTAL | 126.5 | 91.0 | 80.5 | 81.1 | 128.6 | 211.1 | 325.2 | 263.8 |

TABLE 10. SUMMARY OF NOX EMISSIONS (1000 TONS) BY FUEL TYPE FOR MISSISSIPPI

| FUEL TYPE | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 9.2* | 3.3 | 1.2 | .8 | 6.0 | 18.6 | 21.0 | 42.0 |
| ANTHRACITE COAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDUAL OIL | .3 | .2 | .4 | .5 | 1.0 | 11.9 | 27.7 | 16.1 |
| DISTILLATE OIL | 3.3 | 4.6 | 4.5 | 3.0 | 5.2 | 11.0 | 12.3 | 8.7 |
| NATURAL GAS | 35.9 | 63.6 | 78.4 | 109.5 | 120.4 | 75.1 | 64.5 | 85.6 |
| WOOD | 4.7 | 4.0 | 3.6 | 2.9 | 2.5 | 2.3 | 2.8 | 2.7 |
| GASOLINE, DIESEL | 32.7 | 40.9 | 51.5 | 62.6 | 85.2 | 95.7 | 116.2 | 99.3 |
| OTHER(SMELTERS & MISC.) | 50.9 | 36.3 | 25.6 | 25.9 | 28.8 | 22.5 | 24.1 | 21.9 |
| TOTAL | 137.0 | 152.9 | 165.1 | 205.2 | 249.1 | 237.2 | 268.6 | 276.3 |

TABLE 7. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY FUEL TYPE FOR MISSOURI

| FUEL TYPE | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 409.6 | 566.5 | 692.3 | 816.6 | 821.7 | 810.0 | 726.7 | 553.7 | 603.8 | 751.9 |
| ANTHRACITE COAL | 3.8 | 5.1 | 5.5 | 5.8 | 5.8 | 4.4 | .0* | .0* | .0* | .0* |
| RESIDUAL OIL | .0* | .0* | .0* | .0* | .0* | 6.9 | 6.8 | 7.3 | 6.3 | 11.2 |
| DISTILLATE OIL | .0* | .0* | .0* | .0* | .0* | 2.9 | 2.9 | 2.6 | 3.1 | 4.1 |
| NATURAL GAS | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| WOOD | .5 | .4 | .4 | .4 | .4 | .4 | .3 | .3 | .3 | .3 |
| GASOLINE, DIESEL | .0* | .0* | .0* | .1* | .2* | .5* | 1.0* | 1.2* | 1.6* | 1.3* |
| OTHER | 35.1* | 69.2* | 85.8* | 96.6* | 86.6* | 100.1 | 97.9 | 70.8 | 90.0 | 100.7 |
| TOTAL | 449.0 | 641.2 | 784.1 | 919.5 | 914.8 | 925.2 | 835.7 | 636.0 | 705.2 | 869.6 |

*- MAY NOT INCLUDE ALL EMISSIONS BECAUSE DATUM WAS NOT AVAILABLE



TABLE 8 . SUMMARY OF NOX EMISSIONS (1000 TONS) BY FUEL TYPE FOR MISSOURI

| FUEL TYPE | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 44.2 | 61.0 | 74.1 | 86.4 | 85.9 | 81.6 | 68.7 | 51.9 | 59.0 | 70.8 |
| ANTHRACITE COAL | 2.0 | 2.7 | 2.9 | 3.1 | 3.1 | 2.3 | .0* | .0* | .0* | .0* |
| RESIDUAL OIL | .0* | .0* | .0* | .0* | .0* | 1.6 | 1.5 | 1.6 | 2.3 | 2.9 |
| DISTILLATE OIL | .0* | .0* | .0* | .0* | .0* | 17.2 | 16.2 | 13.3 | 14.9 | 18.3 |
| NATURAL GAS | .0* | .0* | .0* | 2.8* | .7* | .6* | 10.2* | 10.8* | 15.4* | 24.1* |
| WOOD | 3.5 | 3.3 | 3.2 | 3.0 | 2.9 | 2.8 | 2.6 | 2.5 | 2.4 | 2.3 |
| GASOLINE, DIESEL | .0* | .1* | .3* | 1.7* | 6.0* | 12.9* | 26.7* | 30.9* | 40.9* | 34.2* |
| OTHER | 31.2* | 32.0* | 32.8* | 33.1* | 33.3* | 34.6 | 23.0 | 22.5 | 24.9 | 42.8 |
| TOTAL | 80.9 | 99.0 | 113.4 | 130.1 | 131.9 | 153.5 | 148.8 | 133.5 | 159.7 | 195.4 |

TABLE 9. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY FUEL TYPE FOR MISSOURI

| FUEL TYPE | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 400.7 | 409.7 | 450.2 | 552.4 | 757.6 | 1188.1 | 1158.5 | 1202.9 |
| ANTHRACITE COAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDUAL OIL | 11.4 | 14.4 | 14.9 | 16.0 | 20.9 | 15.5 | 16.7 | 7.5 |
| DISTILLATE OIL | 6.0 | 8.2 | 12.4 | 9.8 | 9.7 | 8.4 | 11.0 | 5.1 |
| NATURAL GAS | .0 | .1 | .2 | .1 | .1 | .1 | .1 | .1 |
| WOOD | .6 | .4 | .4 | .3 | .2 | .2 | .3 | .4 |
| GASOLINE, DIESEL | 3.0 | 3.8 | 4.7 | 6.2 | 8.2 | 9.5 | 12.2 | 12.2 |
| OTHER(SMELTERS & MISC.) | 84.9 | 79.4 | 73.6 | 254.8 | 192.6 | 72.7 | 70.1 | 55.1 |
| TOTAL | 506.6 | 516.0 | 556.3 | 839.6 | 989.3 | 1294.7 | 1269.0 | 1283.4 |



TABLE 10. SUMMARY OF NOX EMISSIONS (1000 TONS) BY FUEL TYPE FOR MISSOURI

| FUEL TYPE | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 40.1 | 49.5 | 72.0 | 88.9 | 152.1 | 225.3 | 257.0 | 274.2 |
| ANTHRACITE COAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDUAL OIL | 2.9 | 3.7 | 2.4 | 2.4 | 3.0 | 2.7 | 3.1 | 1.2 |
| DISTILLATE OIL | 19.2 | 32.1 | 29.1 | 31.1 | 25.6 | 21.4 | 27.2 | 16.9 |
| NATURAL GAS | 42.6 | 52.9 | 118.9 | 66.6 | 38.7 | 34.4 | 29.9 | 27.2 |
| WOOD | 3.8 | 3.1 | 2.6 | 2.1 | 1.8 | 2.1 | 3.0 | 3.6 |
| GASOLINE, DIESEL | 69.8 | 86.8 | 106.5 | 129.7 | 158.6 | 183.9 | 204.2 | 188.2 |
| OTHER(SMELTERS & MISC.) | 50.2 | 41.7 | 42.1 | 47.6 | 43.5 | 32.9 | 31.2 | 29.5 |
| TOTAL | 228.7 | 269.8 | 373.6 | 368.4 | 423.3 | 502.6 | 555.8 | 540.8 |

TABLE 7. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY FUEL TYPE FOR MONTANA

| FUEL TYPE | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 32.0 | 46.1 | 58.6 | 69.7 | 73.9 | 68.2 | 59.9 | 44.5 | 44.4 | 55.7 |
| ANTHRACITE COAL | .1 | .1 | .1 | .1 | .1 | .1 | .0* | .0* | .0* | .0* |
| RESIDUAL OIL | .0* | .0* | .0* | .0* | .0* | 1.8* | 1.8* | 2.0* | 1.8* | 6.7* |
| DISTILLATE OIL | .0* | .0* | .0* | .0* | .0* | 2.1* | 2.0* | 1.7* | 2.0* | 7.9* |
| NATURAL GAS | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| WOOD | .1 | .1 | .1 | .1 | .1 | .1 | .1 | .1 | .1 | .1 |
| GASOLINE, DIESEL | .0* | .0* | .0* | .0* | .0* | .1* | .1* | .2* | .3* | .2* |
| OTHER | 278.1* | 340.2* | 314.2* | 287.6* | 183.7* | 283.2* | 262.2* | 247.0* | 402.0* | 207.6* |
| TOTAL | 310.2 | 386.4 | 372.9 | 357.5 | 257.8 | 355.5 | 326.2 | 295.5 | 450.7 | 278.2 |

*- MAY NOT INCLUDE ALL EMISSIONS BECAUSE DATUM WAS NOT AVAILABLE



TABLE 8 . SUMMARY OF NOX EMISSIONS (1000 TONS) BY FUEL TYPE FOR MONTANA

| FUEL TYPE | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 10.4 | 14.9 | 18.9 | 22.4 | 23.5 | 21.1 | 17.5 | 12.9 | 12.9 | 15.6 |
| ANTHRACITE COAL | .0 | .0 | .0 | .0 | .0 | .0 | .0* | .0* | .0* | .0* |
| RESIDUAL OIL | .0* | .0* | .0* | .0* | .0* | .3* | .3* | .3* | .3* | .7* |
| DISTILLATE OIL | .0* | .0* | .0* | .0* | .0* | 13.5* | 12.7* | 10.4* | 11.7* | 44.9* |
| NATURAL GAS | .0* | .0* | .0* | .0* | .4* | .9* | 2.9* | 4.4* | 6.2* | 7.5* |
| WOOD | .7 | .7 | .7 | .6 | .6 | .6 | .5 | .5 | .5 | .5 |
| GASOLINE, DIESEL | .0* | .0* | .0* | .2* | .7* | 1.6* | 3.5* | 4.6* | 6.3* | 5.0* |
| OTHER | 9.8* | 10.2* | 10.6* | 10.6* | 10.7* | 11.2* | 5.3* | 7.4* | 12.3* | 9.6* |
| TOTAL | 21.0 | 25.9 | 30.3 | 33.8 | 36.0 | 49.1 | 42.7 | 40.4 | 50.2 | 83.8 |

TABLE 9. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY FUEL TYPE FOR MONTANA

| FUEL TYPE | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 23.7 | 11.1 | 10.1 | 12.4 | 12.1 | 18.7 | 27.9 | 36.5 |
| ANTHRACITE COAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDUAL OIL | 3.8 | 4.5 | 11.0 | 5.0 | 8.5 | 9.4 | 13.6 | 20.5 |
| DISTILLATE OIL | 6.5 | 4.8 | 5.0 | 3.8 | 3.3 | 5.0 | 5.7 | 4.0 |
| NATURAL GAS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| WOOD | .1 | .1 | .1 | .1 | .0 | .0 | .1 | .1 |
| GASOLINE, DIESEL | .9 | 1.0 | 1.4 | 2.1 | 2.2 | 2.5 | 3.1 | 3.0 |
| OTHER(SMELTERS & MISC.) | 265.1 | 348.8 | 292.8 | 316.6 | 393.2 | 145.9 | 118.0 | 98.6 |
| TOTAL | 300.1 | 370.4 | 320.5 | 339.9 | 419.3 | 181.6 | 168.4 | 162.7 |



TABLE 10. SUMMARY OF NOX EMISSIONS (1000 TONS) BY FUEL TYPE FOR MONTANA

| FUEL TYPE | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 5.9 | 2.6 | 4.0 | 5.7 | 8.5 | 15.1 | 41.0 | 42.4 |
| ANTHRACITE COAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDUAL OIL | .6 | .7 | 1.7 | .7 | 1.2 | 2.1 | 2.4 | 4.5 |
| DISTILLATE OIL | 36.0 | 23.2 | 20.5 | 15.8 | 13.7 | 17.4 | 17.3 | 19.4 |
| NATURAL GAS | 8.8 | 9.8 | 10.1 | 13.0 | 12.6 | 9.7 | 9.6 | 11.7 |
| WOOD | .8 | .7 | .6 | .6 | .5 | .5 | .8 | .9 |
| GASOLINE, DIESEL | 16.5 | 19.8 | 26.4 | 34.3 | 36.0 | 41.3 | 46.8 | 42.2 |
| OTHER(SMELTERS & MISC.) | 5.6 | 5.9 | 9.5 | 6.0 | 9.2 | 4.9 | 4.7 | 8.8 |
| TOTAL | 74.1 | 62.6 | 72.7 | 76.0 | 81.7 | 91.0 | 122.6 | 129.9 |

TABLE 7. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY FUEL TYPE FOR NEBRASKA

| FUEL TYPE | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 177.2 | 233.7 | 269.6 | 289.8 | 287.7 | 259.0 | 219.4 | 155.0 | 156.3 | 186.3 |
| ANTHRACITE COAL | 5.4 | 7.3 | 7.8 | 8.2 | 8.3 | 6.2 | .0* | .0* | .0* | .0* |
| RESIDUAL OIL | .0* | .0* | .0* | .0* | .0* | 3.5 | 3.1 | 3.1 | 3.2 | 4.4 |
| DISTILLATE OIL | .0* | .0* | .0* | .0* | .0* | .5* | .5* | .5* | .9* | 1.6* |
| NATURAL GAS | .0* | .0* | .0* | .0* | .0* | .0* | .0* | 0* | .0* | .0* |
| WOOD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| GASOLINE, DIESEL | .0* | .0* | .0* | .0* | .1* | .3* | .5* | .5* | .5* | .5* |
| OTHER | 9.6* | 10.2* | 10.9* | 11.1* | 11.2* | 12.2 | 12.9 | 12.4 | 11.8 | 12.3 |
| TOTAL | 192.2 | 251.2 | 288.4 | 309.2 | 307.4 | 281.7 | 236.4 | 171.5 | 172.6 | 205.2 |

*- MAY NOT INCLUDE ALL EMISSIONS BECAUSE DATUM WAS NOT AVAILABLE



TABLE 8 . SUMMARY OF NOX EMISSIONS (1000 TONS) BY FUEL TYPE FOR NEBRASKA

| FUEL TYPE | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 19.6 | 25.9 | 29.9 | 32.5 | 31.8 | 28.1 | 22.9 | 16.1 | 16.6 | 19.4 |
| ANTHRACITE COAL | 2.8 | 3.8 | 4.1 | 4.4 | 4.4 | 3.3 | .0* | .0* | .0* | .0* |
| RESIDUAL OIL | .0* | .0* | .0* | .0* | .0* | .2 | .2 | .2 | .2 | .3 |
| DISTILLATE OIL | .0* | .0* | .0* | .0* | .0* | 2.1* | 2.0* | 1.7* | 2.3* | 5.3* |
| NATURAL GAS | .0* | .0* | .0* | .0* | .0* | .0* | .6* | 3.6* | 5.2* | 8.3* |
| WOOD | .3 | .3 | .3 | .2 | .2 | .2 | .2 | .2 | .2 | .2 |
| GASOLINE, DIESEL | 0* | .0* | .2* | 1.0* | 3.6* | 7.7* | 12.6* | 12.2* | 13.1* | 11.8* |
| OTHER | 5.9* | 6.2* | 6.6* | 6.7* | 6.7* | 7.3 | 7.8 | 7.3 | 6.9 | 9.0 |
| TOTAL | 28.6 | 36.2 | 41.1 | 44.8 | 46.7 | 48.9 | 46.4 | 41.3 | 44.5 | 54.3 |

TABLE 9. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY FUEL TYPE FOR NEBRASKA

| FUEL TYPE | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 80.4 | 43.8 | 42.4 | 64.0 | 57.5 | 35.0 | 56.1 | 57.2 |
| ANTHRACITE COAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDUAL OIL | 3.2 | 1.3 | 1.9 | 2.9 | 6.9 | 4.0 | 6.0 | .3 |
| DISTILLATE OIL | 2.4 | 3.5 | 4.3 | 3.0 | 5.9 | 5.0 | 7.7 | 2.6 |
| NATURAL GAS | .0 | .0 | .0 | .1 | .1 | .1 | .0 | .0 |
| WOOD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| GASOLINE, DIESEL | 1.2 | 1.6 | 1.8 | 2.1 | 3.4 | 4.2 | 5.0 | 4.5 |
| OTHER(SMELTERS & MISC.) | 12.8 | 12.2 | 11.7 | 11.4 | 10.5 | 8.0 | 8.2 | 7.7 |
| TOTAL | 100.0 | 62.5 | 62.2 | 83.4 | 84.3 | 56.2 | 83.1 | 72.4 |



TABLE 10. SUMMARY OF NOX EMISSIONS (1000 TONS) BY FUEL TYPE FOR NEBRASKA

| FUEL TYPE | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 8.7 | 5.6 | 6.5 | 10.3 | 9.3 | 20.6 | 39.6 | 57.9 |
| ANTHRACITE COAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDUAL OIL | .2 | .1 | .1 | .2 | .6 | 1.0 | 1.5 | .1 |
| DISTILLATE OIL | 7.1 | 10.7 | 11.7 | 7.2 | 19.9 | 17.8 | 30.9 | 13.3 |
| NATURAL GAS | 20.5 | 30.8 | 31.5 | 38.8 | 39.2 | 33.5 | 23.8 | 24.4 |
| WOOD | .3 | .2 | .2 | .1 | .1 | .2 | .3 | .3 |
| GASOLINE, DIESEL | 29.3 | 36.7 | 41.7 | 47.8 | 64.7 | 74.8 | 80.8 | 66.3 |
| OTHER(SMELTERS & MISC.) | 11.1 | 10.5 | 11.3 | 20.3 | 12.7 | 10.4 | 8.2 | 9.3 |
| TOTAL | 77.2 | 94.5 | 103.1 | 124.7 | 146.5 | 158.2 | 185.2 | 171.6 |

TABLE 7. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY FUEL TYPE FOR NEVADA

| FUEL TYPE | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 6.1 | 9.8 | 13.8 | 17.5 | 19.8 | 18.1 | 15.3 | 11.1 | 10.9 | 13.3 |
| ANTHRACITE COAL | .0 | .0 | .0 | .0 | .0 | .0 | .0* | .0* | .0* | .0* |
| RESIDUAL OIL | .0* | .0* | .0* | .0* | .0* | .6 | .6 | .7 | .5 | 2.6 |
| DISTILLATE OIL | .0* | .0* | .0* | .0* | .0* | 5.5* | 5.2* | 4.3* | 3.7* | 7.6* |
| NATURAL GAS | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| WOOD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| GASOLINE, DIESEL | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .1* | .1* | .1* |
| OTHER | 1.1* | 1.3* | 69.9* | 70.2* | 53.3* | 76.2 | 80.9 | 77.2 | 172.4 | 112.6 |
| TOTAL | 7.2 | 11.2 | 83.7 | 87.8 | 73.2 | 100.4 | 102.0 | 93.3 | 187.6 | 136.2 |

*- MAY NOT INCLUDE ALL EMISSIONS BECAUSE DATUM WAS NOT AVAILABLE



TABLE 8 . SUMMARY OF NOX EMISSIONS (1000 TONS) BY FUEL TYPE FOR NEVADA

| FUEL TYPE | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 2.0 | 3.2 | 4.5 | 5.7 | 6.5 | 6.1 | 5.1 | 3.6 | 3.6 | 4.2 |
| ANTHRACITE COAL | .0 | .0 | .0 | .0 | .0 | .0 | .0* | .0* | .0* | .0* |
| RESIDUAL OIL | .0* | .0* | .0* | .0* | .0* | .1 | .1 | .1 | .1 | .4 |
| DISTILLATE OIL | .0* | .0* | .0* | .0* | .0* | 35.0* | 32.9* | 27.0* | 22.8* | 48.0* |
| NATURAL GAS | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| WOOD . | .1 | .1 | .1 | .1 | .1 | .1 | .1 | .1 | .1 | .1 |
| GASOLINE, DIESEL | .0* | .0* | .0* | .1* | .2* | .5* | 1.0* | 1.4* | 2.2* | 2.1* |
| OTHER | .2* | .3* | .4* | .4* | .4* | .4 | .5 | .4 | .6 | 1.0 |
| TOTAL | 2.3 | 3.6 | 5.0 | 6.3 | 7.3 | 42.3 | 39.7 | 32.7 | 29.4 | 55.8 |

TABLE 9. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY FUEL TYPE FOR NEVADA

| FUEL TYPE | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 6.6 | 2.8 | 1.7 | 7.0 | 9.7 | 33.3 | 34.2 | 43.1 |
| ANTHRACITE COAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDUAL OIL | 1.5 | .6 | 1.1 | .4 | .7 | 3.8 | 6.4 | 6.1 |
| DISTILLATE OIL | 4.7 | 2.9 | 2.5 | 2.3 | 1.5 | 1.1 | 1.7 | 1.8 |
| NATURAL GAS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| WOOD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| GASOLINE, DIESEL | .4 | .4 | .7 | 1.0 | 1.4 | 1.6 | 2.3 | 2.4 |
| OTHER(SMELTERS & MISC.) | 144.1 | 216.7 | 209.2 | 195.4 | 293.9 | 219.8 | 191.7 | 166.7 |
| TOTAL | 157.3 | 223.4 | 215.1 | 206.0 | 307.2 | 259.6 | 236.3 | 220.2 |

TABLE 10. SUMMARY OF NOX EMISSIONS (1000 TONS) BY FUEL TYPE FOR NEVADA

| FUEL TYPE | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 2.1 | 1.0 | .6 | 2.9 | 7.4 | 52.2 | 44.6 | 53.6 |
| ANTHRACITE COAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDUAL OIL | .2 | .1 | .1 | .1 | .1 | 1.7 | 3.3 | 3.0 |
| DISTILLATE OIL | 27.7 | 15.6 | 9.6 | 9.8 | 5.9 | 2.6 | 5.4 | 7.5 |
| NATURAL GAS | .0 | 5.0 | 2.8 | 6.1 | 7.8 | 8.2 | 12.1 | 8.6 |
| WOOD | .1 | .1 | .1 | .1 | .1 | .1 | .1 | .2 |
| GASOLINE, DIESEL | 6.6 | 8.7 | 12.3 | 18.5 | 23.1 | 27.9 | 35.3 | 35.1 |
| OTHER(SMELTERS & MISC.) | 1.6 | .9 | .6 | 1.9 | 2.5 | 1.4 | .6 | 1.5 |
| TOTAL | 38.4 | 31.4 | 26.2 | 39.4 | 47.0 | 94.1 | 101.5 | 109.6 |

TABLE 7. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY FUEL TYPE FOR NEW HAMPSHIRE

| FUEL TYPE | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 21.1 | 29.1 | 35.3 | 39.9 | 41.6 | 38.4 | 32.8 | 25.4 | 28.4 | 37.4 |
| ANTHRACITE COAL | 20.0 | 27.1 | 29.3 | 30.7 | 31.0 | 23.1 | 8.0 | 6.1 | 10.1 | 10.8 |
| RESIDUAL OIL | .0* | .0* | .0* | .0* | .0* | 2.6* | 2.3* | 2.1* | 3.6 | 1.7 |
| DISTILLATE OIL | .0* | .0* | .0* | .0* | .0* | .4* | .5* | .8* | 1.0* | .9* |
| NATURAL GAS | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| WOOD | .1 | .1 | .1 | .1 | .1 | .1 | .1 | .1 | .1 | .1 |
| GASOLINE, DIESEL | .0* | .0* | .0* | .0* | .0* | .1* | .2* | .2* | .2* | .2* |
| OTHER | 3.3* | 3.4* | 3.5* | 3.5* | 3.5* | 3.7 | 3.8 | 3.7 | 3.6 | 3.7 |
| TOTAL | 44.6 | 59.7 | 68.2 | 74.2 | 76.2 | 68.4 | 47.7 | 38.4 | 47.1 | 54.8 |

*- MAY NOT INCLUDE ALL EMISSIONS BECAUSE DATUM WAS NOT AVAILABLE



TABLE 8 . SUMMARY OF NOX EMISSIONS (1000 TONS) BY FUEL TYPE FOR NEW HAMPSHIRE

| FUEL TYPE | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 5.8 | 8.0 | 9.8 | 11.2 | 11.6 | 10.9 | 9.1 | 6.9 | 7.8 | 9.7 |
| ANTHRACITE COAL | 10.6 | 14.4 | 15.5 | 16.2 | 16.4 | 12.2 | 4.3 | 3.2 | 5.3 | 5.7 |
| RESIDUAL OIL | .0* | .0* | .0* | .0* | .0* | .5* | .4* | .4* | .7 | .4 |
| DISTILLATE OIL | .0* | .0* | .0* | .0* | .0* | .3* | .3* | .4* | .6* | .5* |
| NATURAL GAS | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| WOOD | .8 | .8 | .8 | .7 | .7 | .7 | .6 | .6 | .6 | .5 |
| GASOLINE, DIESEL | .0* | .0* | .1* | .3* | 1.0* | 2.2* | 3.9* | 4.5* | 5.6* | 4.3* |
| OTHER | 2.2* | 2.3* | 2.3* | 2.3* | 2.4* | 2.5 | 2.8 | 2.5 | 2.3 | 3.1 |
| TOTAL | 19.4 | 25.5 | 28.4 | 30.8 | 32.1 | 29.3 | 21.4 | 18.5 | 22.9 | 24.2 |

TABLE 9. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY FUEL TYPE FOR NEW HAMPSHIRE

| FUEL TYPE | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 8.6 | 4.1 | 7.6 | 18.7 | 55.0 | 48.2 | 33.3 | 47.0 |
| ANTHRACITE COAL | 4.3 | 2.2 | 1.6 | .7 | .1 | .1 | .0 | .0 |
| RESIDUAL OIL | 10.2 | 14.5 | 15.2 | 15.5 | 33.1 | 26.1 | 27.1 | 33.0 |
| DISTILLATE OIL | 1.8 | 1.7 | 3.9 | 4.7 | 5.1 | 4.5 | 5.3 | 3.6 |
| NATURAL GAS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| WOOD | .1 | .1 | .1 | .1 | .1 | .1 | .1 | .1 |
| GASOLINE, DIESEL | .3 | .4 | .5 | .6 | 1.0 | 1.2 | 1.5 | 1.6 |
| OTHER(SMELTERS & MISC.) | 3.9 | 3.3 | 2.8 | 2.9 | 2.7 | 1.5 | 1.4 | 1.3 |
| TOTAL | 29.2 | 26.3 | 31.7 | 43.1 | 97.1 | 81.6 | 68.8 | 86.6 |

TABLE 10. SUMMARY OF NOX EMISSIONS (1000 TONS) BY FUEL TYPE FOR NEW HAMPSHIRE

| FUEL TYPE | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 1.8 | 1.2 | 2.2 | 5.3 | 13.8 | 12.2 | 9.1 | 13.2 |
| ANTHRACITE COAL | 2.3 | 1.2 | .8 | .3 | .1 | .0 | .0 | .0 |
| RESIDUAL OIL | 1.8 | 2.5 | 2.6 | 2.7 | 5.8 | 5.1 | 5.8 | 6.2 |
| DISTILLATE OIL | 1.6 | 1.7 | 2.7 | 2.7 | 3.6 | 3.0 | 3.3 | 2.3 |
| NATURAL GAS | .0 | .1 | .3 | .4 | .2 | .3 | .3 | .5 |
| WOOD | .9 | .8 | .8 | .8 | .9 | .9 | 1.4 | 1.6 |
| GASOLINE, DIESEL | 9.0 | 11.5 | 13.2 | 16.5 | 23.8 | 27.8 | 31.5 | 29.5 |
| OTHER(SMELTERS & MISC.) | 4.1 | 3.4 | 2.8 | 3.5 | 3.9 | 2.0 | 1.6 | 1.4 |
| TOTAL | 21.5 | 22.5 | 25.4 | 32.2 | 52.1 | 51.2 | 53.0 | 54.8 |

TABLE 7. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY FUEL TYPE FOR NEW JERSEY

| FUEL TYPE | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 157.5 | 247.7 | 337.6 | 419.6 | 478.1 | 451.8 | 393.5 | 302.6 | 350.4 | 476.5 |
| ANTHRACITE COAL | 85.3 | 115.5 | 124.6 | 130.6 | 131.8 | 98.4 | 98.1 | 74.1 | 123.3 | 124.2 |
| RESIDUAL OIL | .0* | .0* | .0* | .0* | .0* | 172.7 | 182.2 | 159.2 | 159.4 | 250.3 |
| DISTILLATE OIL | .0* | .0* | .0* | .0* | .0* | 1.9 | 2.5 | 3.5 | 4.9 | 12.3 |
| NATURAL GAS | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| WOOD | .2 | .2 | .2 | .2 | .2 | .2 | .2 | .2 | .1 | .1 |
| GASOLINE, DIESEL | .0* | .0* | .0* | .1* | .3* | .7* | 1.4* | 1.5* | 2.1* | 1.5* |
| OTHER | 30.8* | 34.8* | 39.3* | 41.2* | 43.1* | 51.4 | 57.3 | 52.9 | 49.2 | 63.0 |
| TOTAL | 273.8 | 398.3 | 501.7 | 591.7 | 653.5 | 777.0 | 735.1 | 594.0 | 689.5 | 928.0 |

*- MAY NOT INCLUDE ALL EMISSIONS BECAUSE DATUM WAS NOT AVAILABLE



TABLE 8 . SUMMARY OF NOX EMISSIONS (1000 TONS) BY FUEL TYPE FOR NEW JERSEY

| FUEL TYPE | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 34.0 | 53.6 | 73.0 | 91.0 | 103.3 | 102.4 | 89.2 | 68.0 | 79.5 | 104.2 |
| ANTHRACITE COAL | 45.1 | 61.1 | 65.9 | 69.1 | 69.7 | 52.1 | 51.9 | 39.2 | 65.2 | 65.7 |
| RESIDUAL OIL | .0* | .0* | .0* | .0* | .0* | 148.7 | 170.1 | 138.4 | 131.5 | 247.2 |
| DISTILLATE OIL | .0* | .0* | .0* | .0* | .0* | 1.7 | 1.8 | 2.1 | 4.7 | 9.0 |
| NATURAL GAS | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| WOOD | 1 6 | 1.5 | 1.4 | 1.4 | 1.3 | 1.2 | 1.2 | 1.1 | 1.1 | 1.0 |
| GASOLINE, DIESEL | .0* | .1* | .5* | 2.4* | 8.4* | 18.1* | 35.4* | 39.1* | 53.6* | 39.2* |
| OTHER | 12.6* | 14.4* | 16.3* | 16.4* | 16.6* | 21.0 | 29.0 | 21.1 | 16.0 | 25.7 |
| TOTAL | 93.2 | 130.7 | 157.1 | 180.2 | 199.3 | 345.1 | 378.6 | 309.0 | 351.6 | 492.0 |

TABLE 9. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY FUEL TYPE FOR NEW JERSEY

| FUEL TYPE | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 268.4 | 209.7 | 211.4 | 374.9 | 176.0 | 87.9 | 63.9 | 90.4 |
| ANTHRACITE COAL | 82.6 | 52.2 | 24.0 | 17.1 | 6.8 | 1.6 | 1.4 | 1.2 |
| RESIDUAL OIL | 156.6 | 150.2 | 161.4 | 159.6 | 305.1 | 143.5 | 141.8 | 128.4 |
| DISTILLATE OIL | 12.4 | 12.8 | 34.0 | 37.4 | 37.6 | 31.8 | 32.1 | 27.4 |
| NATURAL GAS | .2 | .0 | .0 | .1 | .1 | .1 | .0 | .1 |
| WOOD | .2 | .2 | .1 | .1 | .2 | .2 | .3 | .3 |
| GASOLINE, DIESEL | 3.5 | 4.8 | 5.5 | 7.7 | 10.7 | 12.4 | 13.3 | 14.4 |
| OTHER(SHELTERS & MISC.) | 77.8 | 76.0 | 75.1 | 87.9 | 85.1 | 69.8 | 71.8 | 67.0 |
| TOTAL | 601.7 | 505.8 | 511.5 | 684.7 | 621.6 | 347.3 | 324.7 | 329.8 |



TABLE 10. SUMMARY OF NOX EMISSIONS (1000 TONS) BY FUEL TYPE FOR NEW JERSEY

| FUEL TYPE | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 60.0 | 56.7 | 52.5 | 93.7 | 52.4 | 27.1 | 22.5 | 31.8 |
| ANTHRACITE COAL | 43.7 | 27.6 | 12.7 | 9.0 | 3.6 | .8 | .7 | .6 |
| RESIDUAL OIL | 49.3 | 46.6 | 46.5 | 42.2 | 85.2 | 51.5 | 65.1 | 55.7 |
| DISTILLATE OIL | 16.2 | 22.2 | 31.7 | 32.5 | 38.5 | 37.7 | 34.2 | 26.4 |
| NATURAL GAS | 38.3 | 15.4 | 24.0 | 32.8 | 27.8 | 15.4 | 4.8 | 34.3 |
| WOOD | 1.6 | 1.6 | 1.5 | 1.8 | 2.2 | 2.5 | 3.2 | 3.7 |
| GASOLINE, DIESEL | 71.4 | 97.6 | 115.4 | 147.8 | 224.8 | 261.4 | 255.0 | 241.2 |
| OTHER(SHELTERS & MISC.) | 40.0 | 35.2 | 30.7 | 40.0 | 45.8 | 25.1 | 20.8 | 17.1 |
| TOTAL | 320.6 | 302.9 | 315.0 | 399.8 | 480.4 | 421.5 | 406.3 | 410.8 |

TABLE 7. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY FUEL TYPE FOR NEW MEXICO

| FUEL TYPE | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 8.2 | 14.0 | 20.5 | 26.8 | 30.8 | 28.2 | 24.1 | 17.5 | 17.5 | 21.7 |
| ANTHRACITE COAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDUAL OIL | .0* | .0* | .0* | .0* | .0* | 1.2 | 1.2 | 1.3 | .9 | 1.1 |
| DISTILLATE OIL | .0* | .0* | .0* | .0* | .0* | .4* | .4* | .3* | .5* | 1.9* |
| NATURAL GAS | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| WOOD | .1 | .1 | .1 | .1 | .1 | .1 | .1 | .1 | .1 | .1 |
| GASOLINE, DIESEL | .0* | .0* | .0* | .0* | .0* | .0* | .1* | .1* | .2* | .2* |
| OTHER | 32.3* | 37.0* | 38.9* | 101.9* | 88.7* | 117.8 | 113.9 | 52.4 | 202.3 | 183.1 |
| TOTAL | 40.6 | 51.1 | 59.5 | 128.8 | 119.6 | 147.7 | 139.7 | 71.8 | 221.5 | 208.1 |

*- MAY NOT INCLUDE ALL EMISSIONS BECAUSE DATUM WAS NOT AVAILABLE



TABLE 8 . SUMMARY OF NOX EMISSIONS (1000 TONS) BY FUEL TYPE FOR NEW MEXICO

| FUEL TYPE | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 2.8 | 4.7 | 6.9 | 9.0 | 10.5 | 9.9 | 8.3 | 6.0 | 6.0 | 7.2 |
| ANTHRACITE COAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDUAL OIL | .0* | .0* | .0* | .0* | .0* | .3 | .2 | .2 | .2 | .2 |
| DISTILLATE OIL | .0* | .0* | .0* | .0* | .0* | 2.3* | 2.2* | 1.8* | 2.2* | 9.6* |
| NATURAL GAS | .0* | .0* | .0* | .0* | .0* | .0* | 2.0* | 11.9* | 16.7* | 28.3* |
| WOOD | .7 | .7 | .7 | .6 | .6 | .6 | .5 | .5 | .5 | .5 |
| GASOLINE, DIESEL | .0* | .0* | .0* | .1* | .4* | .8* | 2.1* | 2.5* | 4.0* | 4.2* |
| OTHER | 1.9* | 2.2* | 2.6* | 2.7* | 2.7* | 3.0 | 2.8 | 2.6 | 2.3 | 4.1 |
| TOTAL | 5.4 | 7.6 | 10.2 | 12.4 | 14.1 | 16.9 | 18.1 | 25.6 | 31.9 | 54.1 |

TABLE 9. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY FUEL TYPE FOR NEW MEXICO

| FUEL TYPE | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 12.8 | 5.7 | 6.8 | 57.0 | 93.2 | 84.6 | 102.4 | 114.6 |
| ANTHRACITE COAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDUAL OIL | .8 | .5 | .5 | .3 | .3 | 6.7 | 5.2 | 4.7 |
| DISTILLATE OIL | 1.9 | 2.7 | 2.5 | 2.8 | 2.9 | 3.7 | 5.1 | 3.2 |
| NATURAL GAS | .0 | .1 | .1 | .1 | .1 | .1 | .1 | .1 |
| WOOD | .1 | .1 | .1 | .1 | .1 | .1 | .1 | .1 |
| GASOLINE, DIESEL | .8 | 1.1 | 1.7 | 2.1 | 3.0 | 4.1 | 5.2 | 5.4 |
| OTHER(SMELTERS & MISC.) | 201.1 | 208.4 | 188.9 | 258.0 | 423.4 | 384.3 | 169.5 | 155.5 |
| TOTAL | 217.6 | 218.6 | 200.4 | 320.3 | 523.0 | 483.5 | 287.6 | 283.7 |

TABLE 10. SUMMARY OF NOX EMISSIONS (1000 TONS) BY FUEL TYPE FOR NEW MEXICO

| FUEL TYPE | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 4.6 | 2.2 | 2.2 | 25.3 | 69.7 | 85.8 | 102.0 | 127.1 |
| ANTHRACITE COAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDUAL OIL | .1 | .1 | .1 | .1 | .1 | 1.3 | 1.2 | 1.1 |
| DISTILLATE OIL | 8.3 | 8.9 | 8.4 | 14.5 | 11.8 | 14.6 | 20.2 | 12.4 |
| NATURAL GAS | 57.0 | 82.9 | 79.6 | 88.4 | 119.6 | 106.8 | 96.8 | 113.1 |
| WOOD | .8 | .6 | .5 | .4 | .4 | .4 | .6 | .7 |
| GASOLINE, DIESEL | 12.9 | 18.0 | 26.3 | 33.0 | 44.7 | 60.6 | 70.9 | 68.7 |
| OTHER(SMELTERS & MISC.) | 8.3 | 5.1 | 4.8 | 6.4 | 8.2 | 4.7 | 4.5 | 3.8 |
| TOTAL | 92.0 | 117.9 | 122.0 | 168.1 | 254.6 | 274.3 | 296.1 | 326.8 |

TABLE 7. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY FUEL TYPE FOR NEW YORK

| FUEL TYPE | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 424.0 | 596.9 | 738.7 | 852.7 | 934.4 | 943.1 | 848.0 | 654.0 | 772.6 | 1000.6 |
| ANTHRACITE COAL | 211.7 | 286.8 | 309.3 | 324.3 | 327.2 | 244.3 | 192.0 | 145.1 | 241.4 | 216.3 |
| RESIDUAL OIL | .0* | .0* | .0* | .0* | .0* | 94.2 | 95.3 | 84.0 | 75.6 | 89.1 |
| DISTILLATE OIL | .0* | .0* | .0* | .0* | .0* | 3.9 | 5.1 | 7.0 | 9.6 | 11.5 |
| NATURAL GAS | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| WOOD | .4 | .4 | .4 | .4 | .4 | .3 | .3 | .3 | .3 | .3 |
| GASOLINE, DIESEL | .0* | .0* | .1* | .3* | .9* | 1.9* | 3.5* | 3.7* | 4.5* | 3.2* |
| OTHER | 58.3* | 65.3* | 73.0* | 73.5* | 73.8* | 88.8 | 100.6 | 88.8 | 76.0 | 88.1 |
| TOTAL | 694.5 | 949.4 | 1121.4 | 1251.1 | 1336.7 | 1376.7 | 1244.9 | 983.0 | 1180.1 | 1409.2 |

*- MAY NOT INCLUDE ALL EMISSIONS BECAUSE DATUM WAS NOT AVAILABLE



TABLE 8 . SUMMARY OF NOX EMISSIONS (1000 TONS) BY FUEL TYPE FOR NEW YORK

| FUEL TYPE | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 97.8 | 137.8 | 171.4 | 200.9 | 223.2 | 238.6 | 215.5 | 164.5 | 200.3 | 254.1 |
| ANTHRACITE COAL | 112.0 | 151.7 | 163.6 | 171.5 | 173.0 | 129.2 | 101.6 | 76.7 | 127.7 | 114.4 |
| RESIDUAL OIL | .0* | .0* | .0* | .0* | .0* | 70.2 | 78.8 | 64.5 | 44.5 | 49.4 |
| DISTILLATE OIL | .0* | .0* | .0* | .0* | .0* | 6.9 | 6.9 | 6.9 | 9.0 | 12.4 |
| NATURAL GAS | .0* | .0* | 1.8* | .9* | 1.7* | 1.1* | 2.1* | 2.9* | 4.4* | 3.7* |
| WOOD | 3.3 | 3.1 | 3.0 | 2.8 | 2.7 | 2.6 | 2.4 | 2.3 | 2.3 | 2.1 |
| GASOLINE, DIESEL | .0* | .2* | 1.3* | 6.6* | 23.1* | 49.6* | 90.3* | 95.3* | 115.6* | 82.5* |
| OTHER | 37.8* | 42.2* | 47.2* | 47.2* | 47.2* | 57.1 | 65.9 | 56.6 | 47.0 | 72.6 |
| TOTAL | 250.9 | 335.0 | 388.2 | 429.9 | 470.8 | 555.3 | 563.6 | 469.8 | 550.7 | 591.3 |

TABLE 9. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY FUEL TYPE FOR NEW YORK

| FUEL TYPE | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 745.6 | 648.7 | 741.0 | 853.5 | 674.7 | 372.1 | 342.3 | 369.5 |
| ANTHRACITE COAL | 196.5 | 104.9 | 57.3 | 24.6 | 14.3 | 5.9 | 7.8 | 5.7 |
| RESIDUAL OIL | 157.2 | 103.9 | 285.3 | 419.2 | 610.5 | 589.4 | 549.2 | 469.8 |
| DISTILLATE OIL | 21.3 | 21.9 | 68.9 | 76.8 | 71.9 | 65.3 | 73.3 | 43.1 |
| NATURAL GAS | .0 | .1 | .1 | .2 | .2 | .2 | .2 | .2 |
| WOOD | .6 | .5 | .4 | .4 | .4 | .4 | .6 | .8 |
| GASOLINE, DIESEL | 6.9 | 8.7 | 9.1 | 12.6 | 15.9 | 15.7 | 19.0 | 18.8 |
| OTHER(SMELTERS & MISC.) | 103.2 | 85.3 | 70.0 | 68.6 | 61.1 | 31.0 | 29.1 | 25.5 |
| TOTAL | 1231.3 | 974.0 | 1232.2 | 1455.8 | 1449.0 | 1079.9 | 1021.5 | 933.5 |

TABLE 10. SUMMARY OF NOX EMISSIONS (1000 TONS) BY FUEL TYPE FOR NEW YORK

| FUEL TYPE | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 205.7 | 206.2 | 195.1 | 225.3 | 190.4 | 95.7 | 100.0 | 99.7 |
| ANTHRACITE COAL | 103.9 | 55.5 | 30.3 | 13.0 | 7.6 | 3.1 | 4.1 | 3.0 |
| RESIDUAL OIL | 56.2 | 40.9 | 64.3 | 88.1 | 143.1 | 145.2 | 148.4 | 118.9 |
| DISTILLATE OIL | 35.5 | 49.6 | 75.5 | 71.0 | 70.2 | 63.1 | 67.7 | 40.2 |
| NATURAL GAS | 6.8 | 36.0 | 60.7 | 75.7 | 62.9 | 37.4 | 34.7 | 67.8 |
| WOOD | 5.2 | 4.8 | 4.4 | 4.3 | 4.6 | 4.5 | 6.3 | 7.8 |
| GASOLINE, DIESEL | 148.1 | 184.6 | 212.5 | 266.2 | 365.1 | 348.0 | 373.3 | 346.6 |
| OTHER(SMELTERS & MISC.) | 107.7 | 89.4 | 72.1 | 83.9 | 90.5 | 42.7 | 31.9 | 24.9 |
| TOTAL | 669.2 | 667.2 | 715.0 | 827.5 | 934.4 | 739.8 | 766.5 | 708.9 |

TABLE 7. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY FUEL TYPE FOR NORTH CAROLINA

| FUEL TYPE | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 28.3 | 50.1 | 75.4 | 103.9 | 134.8 | 161.1 | 170.2 | 150.7 | 192.5 | 281.3 |
| ANTHRACITE COAL | .6 | .9 | .9 | 1.0 | 1.0 | .7 | .0* | .0* | .0* | .0* |
| RESIDUAL OIL | .0* | .0* | .0* | .0* | .0* | .4* | .5* | .5* | 1.2* | 2.6* |
| DISTILLATE OIL | .0* | .0* | .0* | .0* | .0* | .3 | .4 | .5 | 1.0 | 1.7 |
| NATURAL GAS | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| WOOD | .9 | .9 | .8 | .8 | .8 | .7 | .7 | .7 | .6 | .6 |
| GASOLINE, DIESEL | .0* | .0* | .0* | .1* | .2* | .4* | .6* | .7* | 1.1* | 1.1* |
| OTHER | 21.9* | 23.7* | 25.8* | 26.6* | 27.2* | 32.1* | 36.0* | 32.9* | 29.8* | 37.5* |
| TOTAL | 51.7 | 75.5 | 103.0 | 132.3 | 163.9 | 195.7 | 208.4 | 186.0 | 226.3 | 324.8 |

*- MAY NOT INCLUDE ALL EMISSIONS BECAUSE DATUM WAS NOT AVAILABLE



TABLE 8 . SUMMARY OF NOX EMISSIONS (1000 TONS) BY FUEL TYPE FOR NORTH CAROLINA

| FUEL TYPE | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 5.9 | 10.4 | 15.5 | 21.1 | 29.6 | 39.6 | 41.9 | 36.6 | 48.7 | 69.3 |
| ANTHRACITE COAL | .3 | .5 | .5 | .5 | .5 | .4 | .0* | .0* | .0* | .0* |
| RESIDUAL OIL | .0* | .0* | .0* | .0* | .0* | .2* | .2* | .2* | .4* | 2.3* |
| DISTILLATE OIL | .0* | .0* | .0* | .0* | .0* | .5 | .5 | .5 | 1.3 | 3.6 |
| NATURAL GAS | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| WOOD | 6.9 | 6.5 | 6.2 | 6.0 | 5.7 | 5.4 | 5.1 | 4.9 | 4.8 | 4.5 |
| GASOLINE, DIESEL | .0* | .0* | .3* | 1.3* | 4.6* | 10.0* | 15.5* | 19.0* | 27.4* | 27.1* |
| OTHER | 19.4* | 20.2* | 21.1* | 21.1* | 21.2* | 24.0* | 24.5* | 16.8* | 19.7* | 27.4* |
| TOTAL | 32.5 | 37.6 | 43.6 | 50.0 | 61.7 | 80.1 | 87.8 | 78.0 | 102.3 | 134.1 |

TABLE 9. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY FUEL TYPE FOR NORTH CAROLINA

| FUEL TYPE | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 247.4 | 239.7 | 200.1 | 290.9 | 481.2 | 466.0 | 456.4 | 468.6 |
| ANTHRACITE COAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDUAL OIL | 4.3* | 10.3* | 19.0* | 20.3* | 33.4* | 43.2 | 72.3 | 57.9 |
| DISTILLATE OIL | 6.3 | 12.5 | 17.9 | 14.4 | 16.3 | 12.0 | 12.6 | 11.2 |
| NATURAL GAS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| WOOD | 1.0 | .8 | .7 | .5 | .4 | .4 | .6 | .8 |
| GASOLINE, DIESEL | 2.6 | 3.5 | 3.8 | 5.1 | 8.2 | 10.5 | 13.6 | 13.5 |
| OTHER(SMELTERS & MISC.) | 46.2 | 42.7 | 51.3 | 42.2 | 42.8 | 32.9 | 33.5 | 31.1 |
| TOTAL | 307.8 | 309.5 | 292.8 | 373.4 | 582.4 | 565.1 | 589.1 | 583.2 |

TABLE 10. SUMMARY OF NOX EMISSIONS (1000 TONS) BY FUEL TYPE FOR NORTH CAROLINA

| FUEL TYPE | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 71.3 | 80.6 | 89.6 | 135.4 | 242.4 | 241.5 | 243.9 | 278.9 |
| ANTHRACITE COAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDUAL OIL | .9 | 2.1 | 4.0 | 4.3 | 6.7 | 7.3 | 13.7 | 10.2 |
| DISTILLATE OIL | 10.9 | 21.2 | 22.7 | 29.2 | 26.6 | 20.1 | 20.8 | 18.6 |
| NATURAL GAS | .0 | 5.1 | 14.0 | 22.5 | 20.6 | 11.3 | 7.7 | 16.8 |
| WOOD | 7.4 | 6.4 | 5.7 | 5.1 | 4.9 | 4.9 | 7.6 | 8.6 |
| GASOLINE, DIESEL | 64.6 | 85.3 | 100.1 | 127.9 | 173.2 | 213.4 | 239.4 | 216.8 |
| OTHER(SMELTERS & MISC.) | 39.4 | 37.3 | 21.6 | 26.4 | 29.5 | 14.4 | 11.7 | 9.7 |
| TOTAL | 194.4 | 238.1 | 257.7 | 350.7 | 503.9 | 512.9 | 544.7 | 559.5 |

TABLE 7. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY FUEL TYPE FOR NORTH DAKOTA

| FUEL TYPE | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 6.8 | 13.4 | 21.2 | 30.3 | 34.3 | 31.4 | 28.1 | 21.1 | 24.4 | 33.1 |
| ANTHRACITE COAL | 3.7 | 5.0 | 5.4 | 5.6 | 5.7 | 4.2 | .0* | .0* | .0* | .0* |
| RESIDUAL OIL | .0* | .0* | .0* | .0* | .0* | .1 | .1 | .2 | .0* | .1* |
| DISTILLATE OIL | .0* | .0* | .0* | .0* | .0* | .1* | .1* | .1* | .3* | 1.1* |
| NATURAL GAS | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| WOOD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| GASOLINE, DIESEL | .0* | .0* | .0* | .0* | .1* | .1* | .2* | .2* | .2* | .2* |
| OTHER | 4.9* | 6.1* | 7.4* | 7.7* | 7.9* | 8.6 | 9.2 | 9.0* | 8.8* | 9.9* |
| TOTAL | 15.4 | 24.5 | 34.0 | 43.6 | 48.0 | 44.5 | 37.6 | 30.5 | 33.7 | 44.4 |

*- MAY NOT INCLUDE ALL EMISSIONS BECAUSE DATUM WAS NOT AVAILABLE



TABLE 8 . SUMMARY OF NOX EMISSIONS (1000 TONS) BY FUEL TYPE FOR NORTH DAKOTA

| FUEL TYPE | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 3.4 | 6.9 | 11.2 | 16.1 | 18.2 | 15.7 | 13.8 | 10.5 | 11.5 | 15.4 |
| ANTHRACITE COAL | 1.9 | 2.6 | 2.8 | 3.0 | 3.0 | 2.2 | .0* | .0* | .0* | .0* |
| RESIDUAL OIL | .0* | .0* | .0* | .0* | .0* | .0 | .0 | .0 | .0* | .0* |
| DISTILLATE OIL | .0* | .0* | .0* | .0* | .0* | .1* | .1* | .1* | .4* | 5.5* |
| NATURAL GAS | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .1* |
| WOOD | .1 | .1 | .1 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| GASOLINE, DIESEL | .0* | .0* | .1* | .4* | 1.5* | 3.2* | 4.1* | 5.0* | 5.3* | 4.5* |
| OTHER | 1.7* | 2.3* | 3.0* | 3.0* | 3.0* | 3.4 | 3.6 | 3.3* | 3.7* | 4.9* |
| TOTAL | 7.1 | 11.9 | 17.2 | 22.6 | 25.7 | 24.8 | 21.6 | 19.0 | 20.9 | 30.3 |

TABLE 9. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY FUEL TYPE FOR NORTH DAKOTA

| FUEL TYPE | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 51.2 | 40.5 | 33.9 | 26.6 | 39.0 | 52.2 | 78.6 | 100.9 |
| ANTHRACITE COAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDUAL OIL | .2 | 1.6 | 3.0 | 4.3 | 3.7 | 6.0 | 4.6 | 3.6 |
| DISTILLATE OIL | 1.7 | 2.0 | 3.6 | 3.7 | 3.5 | 2.5 | 2.4 | 3.9 |
| NATURAL GAS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| WOOD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| GASOLINE, DIESEL | .6 | .8 | 1.1 | 1.2 | 1.9 | 1.6 | 1.9 | 2.3 |
| OTHER(SMELTERS & MISC.) | 11.0 | 11.3 | 11.7 | 11.7 | 12.0 | 10.6 | 11.2 | 10.6 |
| TOTAL | 64.7 | 56.3 | 53.4 | 47.6 | 60.2 | 72.9 | 98.7 | 121.3 |

TABLE 10. SUMMARY OF NOX EMISSIONS (1000 TONS) BY FUEL TYPE FOR NORTH DAKOTA

| FUEL TYPE | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 16.3 | 11.4 | 11.4 | 9.6 | 23.2 | 38.3 | 65.7 | 89.3 |
| ANTHRACITE COAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDUAL OIL | .0 | .4 | .6 | .8 | .7 | .9 | .8 | .5 |
| DISTILLATE OIL | 4.7 | 5.1 | 4.5 | 6.1 | 6.2 | 7.2 | 9.5 | 11.5 |
| NATURAL GAS | 1.4 | 3.0 | 3.2 | 4.7 | 18.6 | 16.4 | 16.8 | 2.6 |
| WOOD | .1 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| GASOLINE, DIESEL | 12.7 | 16.0 | 21.0 | 25.1 | 30.3 | 30.0 | 31.8 | 33.0 |
| OTHER(SMELTERS & MISC.) | 4.7 | 4.9 | 5.0 | 3.8 | 3.9 | 2.5 | 3.6 | 3.9 |
| TOTAL | 39.9 | 40.8 | 45.8 | 50.0 | 82.9 | 95.3 | 128.2 | 140.9 |

TABLE 7. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY FUEL TYPE FOR OHIO

| FUEL TYPE | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 932.9 | 1294.6 | 1595.3 | 1862.6 | 1983.6 | 2009.6 | 1846.1 | 1509.8 | 1812.9 | 2435.8 |
| ANTHRACITE COAL | 6.1 | 8.3 | 8.9 | 9.4 | 9.4 | 7.1 | 1.4 | 1.1 | 1.8 | 1.7 |
| RESIDUAL OIL | .0* | .0* | .0* | .0* | .0* | 31.9 | 30.9 | 31.1 | 32.4 | 54.2 |
| DISTILLATE OIL | .0* | .0* | .0* | .0* | .0* | .6 | .6 | .7 | 1.3 | 3.5 |
| NATURAL GAS | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .1* |
| WOOD | .4 | .4 | .4 | .4 | .4 | .3 | .3 | .3 | .3 | .3 |
| GASOLINE, DIESEL | .0* | .0* | .0* | .2* | .7* | 1.4* | 2.2* | 2.3* | 3.2* | 2.7* |
| OTHER | 42.4* | 45.7* | 49.4* | 50.7* | 51.6* | 60.8 | 68.0 | 62.2 | 55.5 | 67.5 |
| TOTAL | 981.8 | 1349.0 | 1654.1 | 1923.3 | 2045.7 | 2111.7 | 1949.7 | 1607.4 | 1907.4 | 2565.8 |

*- MAY NOT INCLUDE ALL EMISSIONS BECAUSE DATUM WAS NOT AVAILABLE



TABLE 8 . SUMMARY OF NOX EMISSIONS (1000 TONS) BY FUEL TYPE FOR OHIO

| FUEL TYPE | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 143.8 | 199.1 | 245.5 | 287.9 | 307.1 | 316.4 | 284.4 | 231.1 | 284.0 | 371.1 |
| ANTHRACITE COAL | 3.2 | 4.4 | 4.7 | 4.9 | 5.0 | 3.7 | .7 | .6 | .9 | .9 |
| RESIDUAL OIL | .0* | .0* | .0* | .0* | .0* | 8.0 | 7.8 | 7.7 | 8.4 | 13.7 |
| DISTILLATE OIL | .0* | .0* | .0* | .0* | .0* | 1.1 | 1.1 | 1.0 | 2.1 | 6.4 |
| NATURAL GAS | .0* | .0* | 31.5* | 45.6* | 29.1* | 21.3* | 26.3* | 19.7* | 28.4* | 33.1* |
| WOOD | 3.3 | 3.1 | 3.0 | 2.9 | 2.7 | 2.6 | 2.5 | 2.4 | 2.3 | 2.1 |
| GASOLINE, DIESEL | .0* | .1* | .9* | 4.8* | 16.8* | 36.1* | 57.3* | 59.7* | 81.6* | 69.2* |
| OTHER | 22.9* | 24.5* | 26.3* | 26.4* | 26.5* | 32.0 | 36.7 | 31.9 | 26.9 | 41.4 |
| TOTAL | 173.2 | 231.2 | 312.0 | 372.5 | 387.2 | 421.2 | 416.7 | 353.9 | 434.7 | 538.0 |

TABLE 9. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY FUEL TYPE FOR OHIO

| FUEL TYPE | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 2033.6 | 1889.2 | 2327.5 | 2609.6 | 3117.8 | 3086.2 | 2684.8 | 2684.9 |
| ANTHRACITE COAL | 1.1 | 2.2 | 2.6 | 2.2 | 2.7 | 1.0 | .9 | 1.5 |
| RESIDUAL OIL | 80.0 | 84.6 | 50.3 | 45.4 | 24.3 | 50.2 | 52.5 | 29.6 |
| DISTILLATE OIL | 8.3 | 13.1 | 20.5 | 22.4 | 20.0 | 22.5 | 30.1 | 22.4 |
| NATURAL GAS | .1 | .2 | .2 | .3 | .3 | .3 | .3 | .1 |
| WOOD | .5 | .4 | .3 | .3 | .3 | .3 | .5 | .7 |
| GASOLINE, DIESEL | 5.7 | 7.5 | 8.3 | 11.8 | 16.8 | 20.4 | 24.1 | 25.3 |
| OTHER(SHELTERS & MISC.) | 81.1 | 73.9 | 68.1 | 72.6 | 72.3 | 52.8 | 53.3 | 49.2 |
| TOTAL | 2210.3 | 2071.0 | 2477.8 | 2764.5 | 3254.5 | 3233.7 | 2846.5 | 2813.7 |



TABLE 10. SUMMARY OF NOX EMISSIONS (1000 TONS) BY FUEL TYPE FOR OHIO

| FUEL TYPE | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 321.6 | 332.3 | 406.6 | 462.6 | 588.4 | 619.9 | 636.8 | 639.6 |
| ANTHRACITE COAL | .6 | 1.1 | 1.4 | 1.2 | 1.4 | .5 | .5 | .8 |
| RESIDUAL OIL | 19.5 | 20.3 | 12.7 | 11.2 | 6.8 | 9.6 | 13.6 | 7.0 |
| DISTILLATE OIL | 22.6 | 41.7 | 55.7 | 52.6 | 40.0 | 47.4 | 55.4 | 71.4 |
| NATURAL GAS | 56.8 | 80.4 | 110.9 | 145.2 | 82.4 | 70.2 | 68.5 | 40.5 |
| WOOD | 3.5 | 3.1 | 2.8 | 2.9 | 3.3 | 3.5 | 5.2 | 6.1 |
| GASOLINE, DIESEL | 130.7 | 168.7 | 194.4 | 248.9 | 337.7 | 388.8 | 411.4 | 393.9 |
| OTHER(SHELTERS & MISC.) | 61.8 | 52.4 | 44.2 | 54.8 | 61.5 | 32.3 | 26.1 | 21.4 |
| TOTAL | 617.2 | 700.1 | 828.7 | 979.4 | 1121.6 | 1172.2 | 1217.5 | 1180.7 |

TABLE 7. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY FUEL TYPE FOR OKLAHOMA

| FUEL TYPE | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 52.1 | 108.2 | 178.5 | 257.4 | 296.7 | 271.9 | 236.0 | 168.4 | 169.5 | 207.4 |
| ANTHRACITE COAL | .0 | .0 | .0 | .0 | .0 | .0 | .0* | .0* | .0* | .0* |
| RESIDUAL OIL | .0* | .0* | .0* | .0* | .0* | 14.8 | 13.6 | 13.2 | 12.3 | 15.2 |
| DISTILLATE OIL | .0* | .0* | .0* | .0* | .0* | 9.3* | 8.7* | 7.2* | 7.2* | 7.7 |
| NATURAL GAS | .0* | .0* | .0* | .0* | .0* | .1* | .1* | .0* | .1* | .1* |
| WOOD | .2 | .1 | .1 | .1 | .1 | .1 | .1 | .1 | .1 | .1 |
| GASOLINE, DIESEL | .0* | .0* | .0* | .1* | .2* | .4* | .7* | .7* | .9* | .7* |
| OTHER | 14.7* | 18.7* | 55.9* | 90.5* | 81.1* | 129.6 | 84.4 | 71.0 | 99.8 | 99.1 |
| TOTAL | 67.0 | 127.0 | 234.5 | 348.1 | 378.1 | 426.1* | 343.6 | 260.7 | 289.9 | 330.4 |

*- MAY NOT INCLUDE ALL EMISSIONS BECAUSE DATUM HAS NOT AVAILABLE



TABLE 8 . SUMMARY OF NOX EMISSIONS (1000 TONS) BY FUEL TYPE FOR OKLAHOMA

| FUEL TYPE | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 4.7 | 9.5 | 15.6 | 22.4 | 25.8 | 23.9 | 20.4 | 14.4 | 14.9 | 17.9 |
| ANTHRACITE COAL | .0 | .0 | .0 | .0 | .0 | .0 | .0* | .0* | .0* | .0* |
| RESIDUAL OIL | .0* | .0* | .0* | .0* | .0* | 3.2 | 3.1 | 3.0 | 2.6 | 2.8 |
| DISTILLATE OIL | .0* | .0* | .0* | .0* | .0* | 59.4* | 55.9* | 45.8* | 44.8* | 46.4 |
| NATURAL GAS | .0* | .0* | 13.8* | 33.9* | 65.5* | 115.7* | 172.3* | 66.6* | 93.4* | 90.4* |
| WOOD | 1.1 | 1.1 | 1.0 | 1.0 | .9 | .9 | .9 | .8 | .8 | .7 |
| GASOLINE, DIESEL | .0* | .0* | .3* | 1.3* | 4.6* | 9.9* | 18.6* | 19.0* | 23.6* | 19.1* |
| OTHER | 7.1* | 9.4* | 11.9* | 12.1* | 12.2* | 14.5 | 55.3 | 23.2 | 71.6 | 43.2 |
| TOTAL | 12.9 | 20.1 | 42.6 | 70.7 | 109.0 | 227.5 | 326.4 | 172.8 | 251.7 | 220.6 |

TABLE 9. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY FUEL TYPE FOR OKLAHOMA

| FUEL TYPE | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 84.2 | 59.3 | 26.0 | 26.0 | 7.6 | 7.3 | 33.6 | 86.0 |
| ANTHRACITE COAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDUAL OIL | 9.7 | 5.6 | 7.7 | 3.0 | 3.8 | 5.0 | 4.8 | 3.9 |
| DISTILLATE OIL | 6.4 | 3.1 | 1.6 | 2.2 | 2.1 | 3.8 | 4.7 | 2.2 |
| NATURAL GAS | .1 | .1 | .1 | .1 | .2 | .2 | .2 | .2 |
| WOOD | .2 | .1 | .1 | .1 | .1 | .1 | .2 | .2 |
| GASOLINE, DIESEL | 1.7 | 2.1 | 2.8 | 3.3 | 5.4 | 7.3 | 10.1 | 10.3 |
| OTHER(SMELTERS & MISC.) | 130.6 | 154.0 | 117.3 | 81.6 | 67.4 | 51.0 | 51.3 | 44.4 |
| TOTAL | 232.8 | 224.4 | 155.6 | 116.4 | 86.5 | 74.7 | 105.0 | 147.3 |



TABLE 10. SUMMARY OF NOX EMISSIONS (1000 TONS) BY FUEL TYPE FOR OKLAHOMA

| FUEL TYPE | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 7.8 | 7.8 | 4.9 | 5.2 | 1.7 | 1.9 | 22.7 | 98.3 |
| ANTHRACITE COAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDUAL OIL | 1.7 | 1.5 | 1.6 | .6 | .7 | .8 | 1.1 | .8 |
| DISTILLATE OIL | 31.5 | 10.8 | 5.2 | 7.2 | 6.4 | 8.2 | 7.8 | 6.9 |
| NATURAL GAS | 105.0 | 116.9 | 92.2 | 131.4 | 223.5 | 219.1 | 231.5 | 203.4 |
| WOOD | 1.3 | 1.0 | .8 | .6 | .6 | .9 | 1.5 | 1.8 |
| GASOLINE, DIESEL | 39.0 | 49.5 | 63.0 | 76.9 | 110.6 | 139.8 | 167.1 | 157.1 |
| OTHER(SMELTERS & MISC.) | 51.8 | 23.8 | 27.1 | 33.5 | 26.0 | 21.6 | 21.8 | 17.3 |
| TOTAL | 238.0 | 211.3 | 194.8 | 255.4 | 369.4 | 392.3 | 453.4 | 485.7 |

TABLE 7. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY FUEL TYPE FOR OREGON

| FUEL TYPE | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 7.1 | 12.3 | 18.2 | 24.3 | 26.4 | 22.1 | 19.9 | 16.3 | 18.3 | 25.2 |
| ANTHRACITE COAL | .0 | .0 | .0 | .0 | .0 | .0 | .0* | .0* | .0* | .0* |
| RESIDUAL OIL | .0* | .0* | .0* | .0* | .0* | 25.8 | 23.6 | 22.5 | 21.4 | 40.6 |
| DISTILLATE OIL | .0* | .0* | .0* | .0* | .0* | 9.7 | 9.0 | 7.6 | 6.6 | 11.8 |
| NATURAL GAS | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| WOOD | .8 | .7 | .7 | .7 | .6 | .6 | .6 | .6 | .5 | .5 |
| GASOLINE, DIESEL | .0* | .0* | .0* | .0* | .1* | .2* | .4* | .4* | .6* | .6* |
| OTHER | 5.1* | 7.0* | 7.3* | 8.3* | 10.1* | 9.1 | 10.3 | 9.7 | 8.3 | 11.7 |
| TOTAL | 13.0 | 20.0 | 26.2 | 33.3 | 37.3 | 67.5 | 63.7 | 57.1 | 55.7 | 90.4 |

*- MAY NOT INCLUDE ALL EMISSIONS BECAUSE DATUM WAS NOT AVAILABLE



TABLE 8 . SUMMARY OF NOX EMISSIONS (1000 TONS) BY FUEL TYPE FOR OREGON

| FUEL TYPE | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 2.4 | 4.2 | 6.2 | 8.3 | 8.7 | 6.8 | 5.9 | 5.1 | 6.1 | 8.4 |
| ANTHRACITE COAL | .0 | .0 | .0 | .0 | .0 | .0 | .0* | .0* | .0* | .0* |
| RESIDUAL OIL | .0* | .0* | .0* | .0* | .0* | 7.4 | 7.3 | 6.4 | 6.6 | 20.8 |
| DISTILLATE OIL | .0* | .0* | .0* | .0* | .0* | 55.6 | 51.9 | 42.7 | 38.8 | 69.6 |
| NATURAL GAS | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| WOOD | 5.8 | 5.5 | 5.3 | 5.0 | 4.8 | 4.6 | 4.3 | 4.2 | 4.1 | 3.8 |
| GASOLINE, DIESEL | .0* | .0* | .2* | .8* | 2.9* | 6.2* | 9.7* | 10.1* | 14.5* | 14.5* |
| OTHER | 12.1* | 12.9* | 13.8* | 13.9* | 14.1* | 15.0 | 14.7 | 16.4 | 11.3 | 37.5 |
| TOTAL | 20.3 | 22.6 | 25.5 | 28.0 | 30.5 | 95.5 | 93.9 | 85.0 | 81.4 | 154.7 |

TABLE 9. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY FUEL TYPE FOR OREGON

| FUEL TYPE | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 16.0 | 9.5 | 3.8 | 5.0 | 3.1 | 3.8 | 6.8 | 18.4 |
| ANTHRACITE COAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDUAL OIL | 34.5 | 38.7 | 25.8 | 21.6 | 33.9 | 22.7 | 18.2 | 18.5 |
| DISTILLATE OIL | 8.6 | 6.8 | 12.6 | 10.3 | 7.4 | 8.4 | 9.0 | 8.0 |
| NATURAL GAS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| WOOD | .5 | .4 | .4 | .3 | .3 | .3 | .4 | .4 |
| GASOLINE, DIESEL | 2.0 | 2.3 | 2.6 | 3.6 | 4.4 | 5.3 | 7.5 | 8.2 |
| OTHER(SMELTERS & MISC.) | 14.1 | 11.9 | 10.3 | 11.7 | 12.0 | 8.0 | 7.9 | 7.4 |
| TOTAL | 75.6 | 69.6 | 55.6 | 52.5 | 61.2 | 48.5 | 49.8 | 60.8 |



TABLE 10. SUMMARY OF NOX EMISSIONS (1000 TONS) BY FUEL TYPE FOR OREGON

| FUEL TYPE | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 4.9 | 3.1 | 3.2 | 3.0 | 1.3 | 1.6 | 3.4 | 15.5 |
| ANTHRACITE COAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDUAL OIL | 7.3 | 8.3 | 4.4 | 3.8 | 5.6 | 3.7 | 5.3 | 4.8 |
| DISTILLATE OIL | 41.3 | 22.9 | 18.7 | 19.5 | 19.6 | 21.7 | 27.6 | 25.9 |
| NATURAL GAS | .0 | .0 | 7.4 | 14.4 | 12.7 | 16.1 | 15.7 | 11.5 |
| WOOD | 4.7 | 4.4 | 4.2 | 4.2 | 4.2 | 4.2 | 5.5 | 5.3 |
| GASOLINE, DIESEL | 38.4 | 45.1 | 53.0 | 69.6 | 85.0 | 99.2 | 122.3 | 120.1 |
| OTHER(SMELTERS & MISC.) | 18.7 | 19.8 | 22.9 | 19.4 | 26.2 | 16.0 | 15.6 | 18.9 |
| TOTAL | 115.3 | 103.6 | 113.7 | 134.0 | 154.6 | 162.5 | 195.5 | 202.0 |

TABLE 7. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY FUEL TYPE FOR PENNSYLVANIA

| FUEL TYPE | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 442.8 | 710.7 | 1006.6 | 1309.3 | 1507.0 | 1696.8 | 1481.8 | 1077.0 | 1197.8 | 1385.6 |
| ANTHRACITE COAL | 237.2 | 321.4 | 346.6 | 363.4 | 366.6 | 273.8 | 106.3 | 80.3 | 133.7 | 150.9 |
| RESIDUAL OIL | .0* | .0* | .0* | .0* | .0* | 91.5 | 91.0 | 86.7 | 85.9 | 155.4 |
| DISTILLATE OIL | .0* | .0* | .0* | .0* | .0* | 1.5 | 1.6 | 1.8 | 2.2 | 7.4 |
| NATURAL GAS | .0* | .0* | .1* | .1* | .0* | .0* | .0* | .0* | .0* | .0* |
| WOOD | .6 | .5 | .5 | .5 | .5 | .4 | .4 | .4 | .4 | .4 |
| GASOLINE, DIESEL | .0* | .0* | .0* | .1* | .4* | 1.0* | 2.2* | 2.7* | 3.7* | 2.8* |
| OTHER | 64.1* | 70.6* | 77.9* | 79.7* | 105.9* | 147.3 | 158.8 | 161.1 | 202.4 | 215.5 |
| TOTAL | 744.7 | 1103.2 | 1431.7 | 1753.0 | 1980.5 | 2212.4 | 1842.2 | 1410.1 | 1626.0 | 1918.0 |

*- MAY NOT INCLUDE ALL EMISSIONS BECAUSE DATUM WAS NOT AVAILABLE



TABLE 8 . SUMMARY OF NOX EMISSIONS (1000 TONS) BY FUEL TYPE FOR PENNSYLVANIA

| FUEL TYPE | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 109.7 | 173.6 | 243.7 | 318.4 | 371.0 | 425.7 | 368.8 | 266.9 | 297.7 | 337.6 |
| ANTHRACITE COAL | 125.5 | 169.9 | 183.3 | 192.2 | 193.9 | 144.8 | 56.2 | 42.5 | 70.7 | 79.8 |
| RESIDUAL OIL | .0* | .0* | .0* | .0* | .0* | 42.2 | 45.7 | 39.6 | 34.4 | 60.1 |
| DISTILLATE OIL | .0* | .0* | .0* | .0* | .0* | 3.3 | 3.2 | 2.8 | 3.0 | 9.0 |
| NATURAL GAS | .0* | .0* | 77.5* | 77.6* | 60.5* | 40.5* | 35.9* | 26.1* | 37.1* | 40.9* |
| WOOD | 4.2 | 4.0 | 3.9 | 3.7 | 3.5 | 3.3 | 3.2 | 3.0 | 3.0 | 2.8 |
| GASOLINE, DIESEL | .0* | .1* | .6* | 3.3* | 11.5* | 24.7* | 55.4* | 69.7* | 93.5* | 72.1* |
| OTHER | 37.0* | 40.5* | 44.4* | 44.7* | 44.8* | 50.7 | 59.3 | 49.6 | 43.5 | 61.4 |
| TOTAL | 276.4 | 388.1 | 553.3 | 639.8 | 685.1 | 735.2 | 627.6 | 500.2 | 582.9 | 663.7 |

TABLE 9. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY FUEL TYPE FOR PENNSYLVANIA

| FUEL TYPE | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 1166.2 | 1148.3 | 1174.3 | 1264.0 | 1912.5 | 1706.6 | 1393.4 | 1719.2 |
| ANTHRACITE COAL | 195.8 | 151.5 | 139.8 | 117.4 | 96.8 | 67.7 | 71.4 | 46.0 |
| RESIDUAL OIL | 164.2 | 169.1 | 175.7 | 181.7 | 258.2 | 150.9 | 185.7 | 108.4 |
| DISTILLATE OIL | 15.1 | 18.5 | 36.6 | 39.3 | 39.6 | 34.9 | 39.1 | 35.5 |
| NATURAL GAS | .1 | .1 | .2 | .2 | .2 | .2 | .2 | .2 |
| WOOD | .6 | .5 | .4 | .4 | .4 | .4 | .6 | .8 |
| GASOLINE, DIESEL | 5.7 | 7.3 | 3.5 | 11.3 | 15.5 | 21.1 | 25.1 | 25.2 |
| OTHER(SHELTERS & MISC.) | 207.8 | 255.9 | 194.4 | 147.1 | 129.5 | 79.8 | 81.7 | 75.5 |
| TOTAL | 1755.4 | 1751.2 | 1729.9 | 1761.4 | 2452.7 | 2061.6 | 1797.3 | 2010.9 |



TABLE 10. SUMMARY OF NOX EMISSIONS (1000 TONS) BY FUEL TYPE FOR PENNSYLVANIA

| FUEL TYPE | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 270.2 | 279.5 | 292.8 | 306.9 | 410.4 | 464.3 | 413.3 | 531.8 |
| ANTHRACITE COAL | 103.5 | 80.1 | 74.0 | 62.1 | 51.2 | 35.8 | 37.8 | 24.3 |
| RESIDUAL OIL | 42.6 | 47.2 | 43.1 | 41.2 | 61.9 | 42.3 | 65.5 | 40.1 |
| DISTILLATE OIL | 38.4 | 54.2 | 57.4 | 56.3 | 56.9 | 50.4 | 59.5 | 57.7 |
| NATURAL GAS | 59.6 | 83.7 | 107.0 | 136.4 | 81.9 | 61.5 | 70.4 | 83.0 |
| WOOD | 4.5 | 4.0 | 3.5 | 3.6 | 4.0 | 4.3 | 6.2 | 7.9 |
| GASOLINE, DIESEL | 135.7 | 169.9 | 201.4 | 244.4 | 325.2 | 394.9 | 430.7 | 392.5 |
| OTHER(SHELTERS & MISC.) | 83.3 | 74.0 | 65.7 | 69.8 | 72.9 | 44.2 | 39.2 | 34.6 |
| TOTAL | 738.0 | 792.6 | 844.9 | 920.5 | 1064.2 | 1097.7 | 1122.6 | 1172.0 |

TABLE 7. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY FUEL TYPE FOR RHODE ISLAND

| FUEL TYPE | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 26.2 | 34.2 | 39.4 | 42.7 | 43.3 | 42.4 | 36.4 | 27.8 | 31.0 | 38.8 |
| ANTHRACITE COAL | 20.0 | 27.1 | 29.3 | 30.7 | 31.0 | 23.1 | 8.0 | 6.1 | 10.1 | 10.8 |
| RESIDUAL OIL | .0* | .0* | .0* | .0* | .0* | 35.5 | 31.2 | 29.1 | 31.5 | 19.8 |
| DISTILLATE OIL | .0* | .0* | .0* | .0* | .0* | .8 | 1.3 | 2.1 | 2.6 | 2.5 |
| NATURAL GAS | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| WOOD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| GASOLINE, DIESEL | .0* | .0* | .0* | .0* | .0* | .1* | .2* | .3* | .3* | .2* |
| OTHER | 3.2* | 3.6* | 4.0* | 4.0* | 4.0* | 4.6 | 5.1 | 4.6 | 4.0 | 4.4 |
| TOTAL | 49.4 | 64.9 | 72.7 | 77.4 | 78.3 | 106.5 | 82.3 | 70.0 | 79.5 | 76.5 |

*- MAY NOT INCLUDE ALL EMISSIONS BECAUSE DATUM WAS NOT AVAILABLE



TABLE 8 . SUMMARY OF NOX EMISSIONS (1000 TONS) BY FUEL TYPE FOR RHODE ISLAND

| FUEL TYPE | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 7.9 | 10.3 | 12.0 | 13.2 | 13.4 | 13.3 | 11.1 | 8.3 | 9.3 | 11.1 |
| ANTHRACITE COAL | 10.6 | 14.4 | 15.5 | 16.2 | 16.4 | 12.2 | 4.3 | 3.2 | 5.3 | 5.7 |
| RESIDUAL OIL | .0* | .0* | .0* | .0* | .0* | 8.5 | 8.1 | 7.4 | 7.7 | 4.0 |
| DISTILLATE OIL | .0* | .0* | .0* | .0* | .0* | .6 | .8 | 1.0 | 1.2 | 1.3 |
| NATURAL GAS | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| WOOD | .2 | .2 | .2 | .2 | .2 | .2 | .2 | .2 | .2 | .1 |
| GASOLINE, DIESEL | .0* | .0* | .1* | .3* | 1.2* | 2.6* | 5.4* | 6.6* | 8.1* | 6.1* |
| OTHER | 2.5* | 2.8* | 3.1* | 3.1* | 3.1* | 3.5 | 4.3 | 3.2 | 2.9 | 4.2 |
| TOTAL | 21.2 | 27.7 | 30.9 | 33.1 | 34.3 | 40.9 | 34.1 | 29.8 | 34.8 | 32.6 |

TABLE 9. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY FUEL TYPE FOR RHODE ISLAND

| FUEL TYPE | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 13.4 | 26.4 | 45.3 | 17.2 | .2 | .0 | .1 | .2 |
| ANTHRACITE COAL | 3.8 | 1.7 | .2 | .1 | .0 | .0 | .0 | .1 |
| RESIDUAL OIL | 47.3 | 45.7 | 28.0 | 19.8 | 52.7 | 18.0* | 15.1 | 8.3 |
| DISTILLATE OIL | 3.6 | 3.0 | 6.2 | 5.3 | 5.3 | 4.6 | 4.7 | 2.9 |
| NATURAL GAS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| WOOD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| GASOLINE, DIESEL | .4 | .6 | .6 | .7 | 1.3 | 1.3 | 1.4 | 1.4 |
| OTHER(SMELTERS & MISC.) | 4.8 | 3.8 | 3.0 | 2.7 | 2.2 | .7 | .6 | .5 |
| TOTAL | 73.3 | 81.2 | 83.3 | 45.9 | 61.7 | 24.7 | 21.9 | 13.4 |

TABLE 10. SUMMARY OF NOX EMISSIONS (1000 TONS) BY FUEL TYPE FOR RHODE ISLAND

| FUEL TYPE | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 4.0 | 10.6 | 12.9 | 4.8 | .0 | .0 | .0 | .1 |
| ANTHRACITE COAL | 2.0 | .9 | .1 | .0 | .0 | .0 | .0 | .0 |
| RESIDUAL OIL | 9.1 | 8.3 | 5.2 | 3.5 | 8.5 | 4.1* | 3.7 | 2.5 |
| DISTILLATE OIL | 2.3 | 1.8 | 4.0 | 3.5 | 4.0 | 3.6 | 3.1 | 1.9 |
| NATURAL GAS | .0 | .6 | 1.7 | 2.3 | 1.9 | 1.7 | 1.3 | 5.3 |
| WOOD | .2 | .2 | .2 | .3 | .4 | .3 | .5 | .5 |
| GASOLINE, DIESEL | 8.2 | 11.5 | 12.5 | 14.5 | 26.3 | 29.1 | 28.1 | 24.3 |
| OTHER(SMELTERS & MISC.) | 5.8 | 4.7 | 3.9 | 4.4 | 4.6 | 2.2 | 1.7 | 1.6 |
| TOTAL | 31.6 | 38.6 | 40.5 | 33.4 | 45.7 | 41.0 | 38.4 | 36.2 |

TABLE 7. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY FUEL TYPE FOR SOUTH CAROLINA

| FUEL TYPE | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 18.8 | 32.9 | 48.9 | 66.5 | 82.1 | 89.7 | 92.1 | 81.0 | 100.6 | 142.8 |
| ANTHRACITE COAL | .6 | .9 | .9 | 1.0 | 1.0 | .7 | .0* | .0* | .0* | .0* |
| RESIDUAL OIL | .0* | .0* | .0* | .0* | .0* | 2.6 | 2.5 | 2.4 | 4.3 | 4.5 |
| DISTILLATE OIL | .0* | .0* | .0* | .0* | .0* | .1 | .1 | .1 | .4 | 1.0 |
| NATURAL GAS | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| WOOD | .5 | .5 | .5 | .5 | .4 | .4 | .4 | .4 | .4 | .3 |
| GASOLINE, DIESEL | .0* | .0* | .0* | .0* | .1* | .2* | .3* | .3* | .5* | .5* |
| OTHER | 11.8* | 12.6* | 13.5* | 13.7* | 13.8* | 15.0 | 19.1 | 15.4 | 15.0 | 16.4 |
| TOTAL | 31.8 | 46.8 | 63.8 | 81.6 | 97.4 | 108.7 | 114.5 | 99.6 | 121.3 | 165.5 |

*- MAY NOT INCLUDE ALL EMISSIONS BECAUSE DATUM WAS NOT AVAILABLE



TABLE 8 . SUMMARY OF NOX EMISSIONS (1000 TONS) BY FUEL TYPE FOR SOUTH CAROLINA

| FUEL TYPE | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 3.8 | 6.6 | 9.7 | 13.1 | 16.9 | 19.9 | 20.8 | 18.9 | 24.8 | 34.7 |
| ANTHRACITE COAL | .3 | .5 | .5 | .5 | .5 | .4 | .0* | .0* | .0* | .0* |
| RESIDUAL OIL | .0* | .0* | .0* | .0* | .0* | 1.2 | 1.3 | 1.1 | 1.8 | 1.2 |
| DISTILLATE OIL | .0* | .0* | .0* | .0* | .0* | .1 | .1 | .1 | .3 | 2.5 |
| NATURAL GAS | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| WOOD | 4.0 | 3.8 | 3.6 | 3.5 | 3.3 | 3.2 | 3.0 | 2.9 | 2.8 | 2.6 |
| GASOLINE, DIESEL | .0* | .0* | .1* | .7* | 2.3* | 4.9* | 7.0* | 8.5* | 13.6* | 13.1* |
| OTHER | 13.8* | 14.3* | 14.8* | 14.8* | 14.9* | 15.6 | 99.4 | 18.3 | 28.8 | 24.9 |
| TOTAL | 21.9 | 25.2 | 28.8 | 32.5 | 37.9 | 45.3 | 131.7 | 49.8 | 72.2 | 79.0 |

TABLE 9. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY FUEL TYPE FOR SOUTH CAROLINA

| FUEL TYPE | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 98.1 | 83.6 | 90.6 | 108.9 | 154.5 | 145.3 | 197.0 | 242.6 |
| ANTHRACITE COAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .2 |
| RESIDUAL OIL | 20.7 | 19.5 | 17.1 | 12.5 | 33.5 | 45.4 | 78.9 | 41.0 |
| DISTILLATE OIL | 3.2 | 5.1 | 6.0 | 3.3 | 5.1 | 3.2 | 4.3 | 3.7 |
| NATURAL GAS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .1 |
| WOOD | .6 | .5 | .4 | .3 | .2 | .2 | .3 | .3 |
| GASOLINE, DIESEL | 1.3 | 1.7 | 2.0 | 2.8 | 4.6 | 5.9 | 7.2 | 7.7 |
| OTHER(SMELTERS & MISC.) | 17.9 | 15.5 | 13.4 | 13.7 | 13.1 | 8.7 | 8.7 | 8.0 |
| TOTAL | 141.7 | 125.9 | 129.5 | 141.5 | 211.1 | 208.7 | 296.4 | 303.6 |

TABLE 10. SUMMARY OF NOX EMISSIONS (1000 TONS) BY FUEL TYPE FOR SOUTH CAROLINA

| FUEL TYPE | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 24.5 | 25.3 | 37.0 | 46.3 | 67.8 | 64.5 | 87.8 | 105.9 |
| ANTHRACITE COAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .1 |
| RESIDUAL OIL | 4.1 | 4.4 | 4.3 | 2.7 | 5.9 | 8.4 | 15.7 | 8.4 |
| DISTILLATE OIL | 5.1 | 6.5 | 6.7 | 5.9 | 8.2 | 5.0 | 8.1 | 7.0 |
| NATURAL GAS | .0 | 12.0 | 15.9 | 23.8 | 22.3 | 13.6 | 12.5 | 16.6 |
| WOOD | 4.3 | 3.7 | 3.3 | 3.0 | 3.0 | 3.1 | 3.7 | 3.6 |
| GASOLINE, DIESEL | 31.1 | 41.8 | 51.2 | 65.5 | 97.2 | 120.7 | 132.2 | 122.5 |
| OTHER(SMELTERS & MISC.) | 20.8 | 16.5 | 12.6 | 14.7 | 16.7 | 9.2 | 8.5 | 6.7 |
| TOTAL | 89.9 | 110.3 | 131.0 | 161.9 | 221.1 | 224.5 | 268.4 | 270.8 |

TABLE 7. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY FUEL TYPE FOR SOUTH DAKOTA

| FUEL TYPE | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 10.4 | 15.3 | 19.6 | 24.1 | 25.3 | 23.2 | 21.3 | 16.8 | 20.9 | 29.9 |
| ANTHRACITE COAL | 1.8 | 2.5 | 2.7 | 2.8 | 2.8 | 2.1 | .0* | .0* | .0* | .0* |
| RESIDUAL OIL | .0* | .0* | .0* | .0* | .0* | .4 | .3 | .3 | .4* | .3 |
| DISTILLATE OIL | .0* | .0* | .0* | .0* | .0* | .2* | .2* | .2* | .4* | .5* |
| NATURAL GAS | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| WOOD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| GASOLINE, DIESEL | .0* | .0* | .0* | .0* | .1* | .2* | .2* | .2* | .3* | .2* |
| OTHER | 3.0* | 3.6* | 4.3* | 4.3* | 4.3* | 4.8* | 5.1* | 4.7 | 4.3 | 4.2 |
| TOTAL | 15.2 | 21.4 | 26.7 | 31.3 | 32.5 | 30.8 | 27.2 | 22.3 | 26.2 | 35.1 |

*- MAY NOT INCLUDE ALL EMISSIONS BECAUSE DATUM WAS NOT AVAILABLE



TABLE 8 . SUMMARY OF NOX EMISSIONS (1000 TONS) BY FUEL TYPE FOR SOUTH DAKOTA

| FUEL TYPE | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 5.3 | 7.6 | 9.6 | 11.3 | 11.6 | 9.9 | 8.8 | 7.2 | 8.7 | 12.2 |
| ANTHRACITE COAL | 1.0 | 1.3 | 1.4 | 1.5 | 1.5 | 1.1 | .0* | .0* | .0* | .0* |
| RESIDUAL OIL | .0* | .0* | .0* | .0* | .0* | .1 | .1 | .1 | .1* | .1 |
| DISTILLATE OIL | .0* | .0* | .0* | .0* | .0* | .7* | .6* | .5* | 1.0* | 1.8* |
| NATURAL GAS | .0* | .0* | .0* | .0* | .0* | .0* | 1.1* | 1.2* | 1.7* | .5* |
| WOOD | .2 | .2 | .1 | .1 | .1 | .1 | .1 | .1 | .1 | .1 |
| GASOLINE, DIESEL | .0* | .0* | .1* | .5* | 1.8* | 4.0* | 5.4* | 6.3* | 7.1* | 6.3* |
| OTHER | 2.0* | 2.5* | 3.0* | 3.0* | 3.0* | 3.3* | 3.5* | 3.4 | 3.5 | 6.7 |
| TOTAL | 8.4 | 11.6 | 14.3 | 16.5 | 18.1 | 19.2 | 19.7 | 18.8 | 22.3 | 27.8 |

TABLE 9. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY FUEL TYPE FOR SOUTH DAKOTA

| FUEL TYPE | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 20.1 | 16.8 | 12.8 | 15.2 | 56.6 | 35.8 | 51.5 | 42.6 |
| ANTHRACITE COAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDUAL OIL | .7 | .4 | .2 | .2 | 1.1 | .8 | .8 | .6 |
| DISTILLATE OIL | 1.3 | 1.9 | 3.2 | 3.0 | 2.8 | 1.9 | 1.3 | 1.4 |
| NATURAL GAS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| WOOD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| GASOLINE, DIESEL | .6 | .7 | .9 | 1.2 | 1.8 | 1.7 | 2.3 | 2.3 |
| OTHER(SMELTERS & MISC.) | 4.0 | 3.5 | 3.0 | 2.2 | 1.6 | .7 | .7 | .6 |
| TOTAL | 26.7 | 23.3 | 20.2 | 21.8 | 63.8 | 41.0 | 56.7 | 47.4 |



TABLE 10. SUMMARY OF NOX EMISSIONS (1000 TONS) BY FUEL TYPE FOR SOUTH DAKOTA

| FUEL TYPE | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 7.1 | 5.3 | 5.2 | 6.4 | 15.3 | 25.8 | 38.4 | 34.0 |
| ANTHRACITE COAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDUAL OIL | .2 | .1 | .0 | .0 | .4 | .2 | .2 | .1 |
| DISTILLATE OIL | 3.0 | 4.9 | 3.0 | 3.7 | 3.0 | 3.1 | 2.6 | 2.4 |
| NATURAL GAS | 1.5 | 3.1 | 3.7 | 3.3 | 2.8 | 2.4 | 2.0 | 2.6 |
| WOOD | .2 | .1 | .1 | .1 | .1 | .1 | .2 | .1 |
| GASOLINE, DIESEL | 15.0 | 16.8 | 21.0 | 26.2 | 32.1 | 32.1 | 38.0 | 35.5 |
| OTHER(SMELTERS & MISC.) | 4.9 | 4.3 | 5.2 | 3.7 | 4.7 | 4.1 | 4.8 | 3.0 |
| TOTAL | 31.9 | 34.7 | 38.3 | 43.3 | 58.4 | 67.8 | 86.1 | 77.8 |

TABLE 7. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY FUEL TYPE FOR TENNESSEE

| FUEL TYPE | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 123.6 | 169.8 | 207.2 | 240.9 | 262.5 | 279.0 | 296.0 | 272.8 | 355.0 | 535.4 |
| ANTHRACITE COAL | .1 | .1 | .1 | .1 | .1 | .1 | .0* | .0* | .0* | .0* |
| RESIDUAL OIL | .0* | .0* | .0* | .0* | .0* | .9 | 1.0 | 1.0 | 1.8 | 5.7 |
| DISTILLATE OIL | .0* | .0* | .0* | .0* | .0* | .3 | .3 | .4 | .6 | 1.9 |
| NATURAL GAS | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| WOOD | .6 | .6 | .6 | .6 | .5 | .5 | .5 | .5 | .5 | .4 |
| GASOLINE, DIESEL | .0* | .0* | .0* | .0* | .1* | .3* | .5* | .7* | .7* | .8* |
| OTHER | 25.2* | 37.3* | 42.3* | 42.4* | 39.4* | 45.4 | 28.5 | 48.9 | 56.9 | 56.3 |
| TOTAL | 149.5 | 207.9 | 250.2 | 284.0 | 302.7 | 326.5 | 326.8 | 324.2 | 415.5 | 600.5 |

*- MAY NOT INCLUDE ALL EMISSIONS BECAUSE DATUM HAS NOT AVAILABLE



TABLE 8 . SUMMARY OF NOX EMISSIONS (1000 TONS) BY FUEL TYPE FOR TENNESSEE

| FUEL TYPE | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 18.5 | 25.4 | 30.8 | 35.2 | 39.2 | 42.2 | 44.6 | 43.3 | 62.3 | 94.5 |
| ANTHRACITE COAL | .0 | .1 | .1 | .1 | .1 | .1 | .0* | .0* | .0* | .0* |
| RESIDUAL OIL | .0* | .0* | .0* | .0* | .0* | .5 | .6 | .5 | 2.1 | 5.3 |
| DISTILLATE OIL | .0* | .0* | .0* | .0* | .0* | 1.0 | 1.0 | .8 | 2.0 | 5.3 |
| NATURAL GAS | .0* | .0* | .0* | .2* | .2* | .4* | 1.8* | 3.1* | 4.4* | 7.5* |
| WOOD | 4.8 | 4.6 | 4.4 | 4.2 | 4.0 | 3.8 | 3.6 | 3.5 | 3.4 | 3.1 |
| GASOLINE, DIESEL | .0* | .0* | .2* | 1.0* | 3.3* | 7.2* | 12.6* | 18.3* | 18.5* | 20.3* |
| OTHER | 18.5* | 19.1* | 19.8* | 20.1* | 20.3* | 21.8 | 32.7 | 23.8 | 33.9 | 32.0 |
| TOTAL | 41.9 | 49.2 | 55.3 | 60.7 | 67.1 | 76.9 | 96.9 | 93.3 | 126.6 | 168.1 |

TABLE 9. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY FUEL TYPE FOR TENNESSEE

| FUEL TYPE | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 329.7 | 443.9 | 752.1 | 716.6 | 967.8 | 1406.0 | 1070.9 | 1120.2 |
| ANTHRACITE COAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDUAL OIL | 3.5 | 2.3 | .8 | 1.2 | 3.4 | 4.8 | 14.4 | 9.1 |
| DISTILLATE OIL | 4.0 | 4.9 | 4.3 | 4.2 | 5.8 | 8.3 | 13.6 | 7.0 |
| NATURAL GAS | .0 | .0 | .0 | .1 | .1 | .1 | .1 | .1 |
| WOOD | .7 | .5 | .4 | .3 | .3 | .3 | .5 | .6 |
| GASOLINE, DIESEL | 1.9 | 2.5 | 3.4 | 4.8 | 7.1 | 10.5 | 13.8 | 12.4 |
| OTHER(SMELTERS & MISC.) | 35.2 | 54.6 | 59.1 | 64.5 | 70.6 | 46.4 | 29.9 | 27.2 |
| TOTAL | 375.0 | 508.8 | 820.1 | 791.6 | 1055.1 | 1476.4 | 1143.0 | 1176.6 |

TABLE 10. SUMMARY OF NOX EMISSIONS (1000 TONS) BY FUEL TYPE FOR TENNESSEE

| FUEL TYPE | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 45.2 | 97.9 | 162.3 | 157.6 | 202.5 | 301.3 | 263.1 | 295.5 |
| ANTHRACITE COAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDUAL OIL | 1.1 | .8 | .2 | .2 | .7 | .6 | 2.3 | 1.6 |
| DISTILLATE OIL | 12.3 | 15.0 | 16.3 | 19.5 | 21.5 | 27.1 | 41.0 | 28.6 |
| NATURAL GAS | 27.2 | 37.1 | 40.8 | 67.6 | 50.3 | 36.1 | 28.4 | 38.2 |
| WOOD | 5.2 | 3.9 | 3.5 | 3.5 | 4.0 | 4.0 | 5.3 | 6.3 |
| GASOLINE, DIESEL | 44.1 | 59.2 | 78.7 | 102.8 | 133.1 | 202.1 | 229.4 | 187.6 |
| OTHER(SMELTERS & MISC.) | 40.7 | 30.0 | 27.5 | 32.4 | 36.6 | 26.0 | 25.4 | 23.0 |
| TOTAL | 175.9 | 243.9 | 329.2 | 383.7 | 448.7 | 597.2 | 595.1 | 580.8 |

TABLE 7. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY FUEL TYPE FO TEXAS

| FUEL TYPE | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 207.7 | 274.4 | 314.3 | 329.9 | 336.2 | 299.9 | 260.2 | 189.9 | 204.2 | 257.4 |
| ANTHRACITE COAL | .2 | .3 | .3 | .3 | .3 | .3 | .0* | .0* | .0* | .0* |
| RESIDUAL OIL | .0* | .0* | .0* | .0* | .0* | 143.8 | 158.0 | 137.6 | 141.9 | 291.0 |
| DISTILLATE OIL | .0* | .0* | .0* | .0* | .0* | 25.3 | 23.9 | 19.8 | 19.0 | 55.1 |
| NATURAL GAS | .0* | .0* | .0* | .0* | .0* | .0* | .2* | .2* | .3* | .4* |
| WOOD | .4 | .4 | .4 | .4 | .3 | .3 | .3 | .3 | .3 | .3 |
| GASOLINE, DIESEL | .0* | .0* | .0* | .1* | .5* | 1.1* | 1.8* | 2.1* | 2.9* | 2.8* |
| OTHER | 180.6* | 204.0* | 230.9* | 257.4* | 259.3* | 308.1 | 313.1 | 310.0 | 314.1 | 417.0 |
| TOTAL | 388.9 | 479.1 | 546.0 | 588.2 | 596.7 | 778.8 | 757.5 | 659.9 | 682.7 | 1024.1 |

*- MAY NOT INCLUDE ALL EMISSIONS BECAUSE DATUM WAS NOT AVAILABLE



TABLE 8 . SUMMARY OF NOX EMISSIONS (1000 TONS) BY FUEL TYPE FOR TEXAS

| FUEL TYPE | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 17.7 | 23.4 | 27.0 | 28.9 | 29.5 | 27.2 | 24.1 | 17.2 | 19.3 | 23.8 |
| ANTHRACITE COAL | .1 | .2 | .2 | .2 | .2 | .1 | .0* | 0* | .0* | .0* |
| RESIDUAL OIL | .0* | .0* | .0* | .0* | .0* | 137.4 | 160.4 | 129.5 | 120.2 | 175.7 |
| DISTILLATE OIL | .0* | .0* | .0* | .0* | .0* | 162.4 | 152.7 | 125.3 | 118.0 | 248.4 |
| NATURAL GAS | .0* | .0* | .0* | 5.3* | 26.2* | 80.3* | 274.0* | 274.1* | 383.6* | 548.7* |
| WOOD | 3.0 | 2.9 | 2.8 | 2.6 | 2.5 | 2.4 | 2.3 | 2.2 | 2.1 | 2.0 |
| GASOLINE, DIESEL | .0* | .1* | .7* | 3.6* | 12.7* | 27.2* | 46.2* | 52.4* | 74.2* | 72.3* |
| OTHER | 39.0* | 42.3* | 46.0* | 47.3* | 48.3* | 55.3 | 84.6 | 55.0 | 57.8 | 76.0 |
| TOTAL | 59.9 | 68.9 | 76.6 | 87.9 | 119.4 | 492.4 | 744.2 | 655.7 | 775.3 | 1146.8 |

TABLE 9. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY FUEL TYPE FOR TEXAS

| FUEL TYPE | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 113.5 | 108.5 | 79.2 | 54.7 | 38.5 | 170.4 | 264.9 | 408.9 |
| ANTHRACITE COAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDUAL OIL | 67.9 | 83.7 | 44.7 | 23.1 | 32.2 | 111.0 | 172.2 | 151.6 |
| DISTILLATE OIL | 32.4 | 22.5 | 16.1 | 12.0 | 20.8 | 31.9 | 39.1 | 28.5 |
| NATURAL GAS | .6 | .8 | 1.0 | 1.1 | 1.2 | 1.2 | 1.3 | 1.4 |
| WOOD | .4 | .3 | .3 | .2 | .2 | .2 | .3 | .3 |
| GASOLINE, DIESEL | 7.6 | 9.6 | 12.4 | 16.1 | 20.9 | 28.3 | 39.8 | 41.1 |
| OTHER(SMELTERS & MISC.) | 567.9* | 654.7* | 646.5* | 665.7* | 746.3* | 691.6 | 738.0 | 680.2 |
| TOTAL | 790.3 | 880.1 | 800.1 | 772.8 | 860.1 | 1034.7 | 1255.5 | 1312.0 |

TABLE 10. SUMMARY OF NOX EMISSIONS (1000 TONS) BY FUEL TYPE FOR TEXAS

| FUEL TYPE | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 11.6 | 13.5 | 12.5 | 10.2 | 8.7 | 84.6 | 206.6 | 357.7 |
| ANTHRACITE COAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDUAL OIL | 36.1 | 40.3 | 24.6 | 15.6 | 16.9 | 44.8 | 73.0 | 75.0 |
| DISTILLATE OIL | 160.5 | 71.4 | 69.6 | 57.1 | 69.9 | 115.4 | 118.8 | 87.3 |
| NATURAL GAS | 712.4 | 835.0 | 1427.1 | 1628.9 | 1486.0 | 1503.3 | 1529.8 | 1306.4 |
| WOOD | 3.2 | 3.0 | 2.8 | 2.9 | 3.7 | 3.9 | 5.4 | 5.5 |
| GASOLINE, DIESEL | 160.8 | 204.7 | 258.9 | 326.7 | 413.2 | 522.5 | 656.4 | 623.2 |
| OTHER(SMELTERS & MISC.) | 101.3 | 93.7 | 95.3 | 120.1 | 141.1 | 106.4 | 140.4 | 93.9 |
| TOTAL | 1185.9 | 1261.7 | 1890.8 | 2161.5 | 2139.4 | 2380.9 | 2730.3 | 2549.1 |

TABLE 7. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY FUEL TYPE FOR UTAH

| FUEL TYPE | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 15.7 | 24.1 | 33.8 | 43.5 | 48.6 | 49.2 | 46.9 | 36.8 | 38.9 | 50.3 |
| ANTHRACITE COAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDUAL OIL | .0* | .0* | .0* | .0* | .0* | 1.0 | 1.0 | 1.0 | 1.0 | 1.4* |
| DISTILLATE OIL | .0* | .0* | .0* | .0* | .0* | .5* | .5* | .4* | .5* | 1.2* |
| NATURAL GAS | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| WOOD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| GASOLINE, DIESEL | .0* | .0* | .0* | .0* | .0* | .1* | .1* | .2* | .2* | .2* |
| OTHER | 45.4* | 84.2* | 167.4* | 227.4* | 140.4* | 301.3* | 242.9* | 169.3* | 585.4* | 517.4* |
| TOTAL | 61.2 | 108.3 | 201.2 | 270.9 | 189.1 | 352.0 | 291.4 | 207.7 | 626.1 | 570.6 |

*- MAY NOT INCLUDE ALL EMISSIONS BECAUSE DATUM WAS NOT AVAILABLE



TABLE 8 . SUMMARY OF NOX EMISSIONS (1000 TONS) BY FUEL TYPE FOR UTAH

| FUEL TYPE | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 4.6 | 7.0 | 9.6 | 12.1 | 13.8 | 14.1 | 13.0 | 10.5 | 11.9 | 15.3 |
| ANTHRACITE COAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDUAL OIL | .0* | .0* | .0* | .0* | .0* | .2 | .2 | .2 | .2 | .2* |
| DISTILLATE OIL | .0* | .0* | .0* | .0* | .0* | 2.6* | 2.5* | 2.0* | 2.3* | 4.8* |
| NATURAL GAS | .0* | .0* | .0* | .0* | .0* | .0* | 1.8* | 4.5* | 6.3* | 9.0* |
| WOOD | .2 | .2 | .2 | .2 | .2 | .2 | .2 | .2 | .2 | .2 |
| GASOLINE, DIESEL | .0* | .0* | .0* | .2* | .6* | 1.3* | 2.4* | 2.8* | 4.2* | 4.3* |
| OTHER | 2.5* | 2.9* | 3.2* | 3.3* | 3.4* | 4.0* | 4.4* | 4.1* | 4.0* | 5.8* |
| TOTAL | 7.3 | 10.1 | 13.1 | 15.8 | 18.0 | 22.3 | 24.4 | 24.3 | 29.1 | 39.5 |

TABLE 9. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY FUEL TYPE FOR UTAH

| FUEL TYPE | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 51.7 | 46.5 | 29.1 | 19.5 | 16.8 | 32.1 | 41.7 | 40.8 |
| ANTHRACITE COAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDUAL OIL | 20.3 | 22.4 | 26.4 | 27.1 | 25.1 | 21.1 | 22.0 | 17.8 |
| DISTILLATE OIL | 3.9 | 3.8 | 3.8 | 3.4 | 3.2 | 6.3 | 5.8 | 4.7 |
| NATURAL GAS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .1 |
| WOOD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .1 |
| GASOLINE, DIESEL | .9 | 1.0 | 1.2 | 1.8 | 2.6 | 3.0 | 3.7 | 4.1 |
| OTHER(SMELTERS & MISC.) | 521.0 | 331.8 | 217.8 | 336.6 | 235.9 | 52.7 | 48.7 | 46.1 |
| TOTAL | 597.9 | 405.6 | 278.4 | 388.5 | 283.7 | 115.2 | 122.0 | 113.6 |

TABLE 10. SUMMARY OF NOX EMISSIONS (1000 TONS) BY FUEL TYPE FOR UTAH

| FUEL TYPE | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 20.8 | 20.9 | 11.4 | 7.2 | 11.1 | 28.5 | 42.0 | 66.1 |
| ANTHRACITE COAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDUAL OIL | 3.3 | 4.3 | 5.8 | 6.0 | 5.0 | 4.8 | 4.4 | 3.3 |
| DISTILLATE OIL | 21.6 | 16.3 | 16.0 | 13.6 | 14.2 | 18.8 | 17.6 | 19.3 |
| NATURAL GAS | 6.8 | 13.7 | 15.6 | 25.8 | 9.4 | 16.7 | 19.5 | 22.8 |
| WOOD | .3 | .2 | .2 | .2 | .2 | .2 | .4 | .4 |
| GASOLINE, DIESEL | 12.2 | 14.9 | 19.2 | 26.6 | 36.8 | 45.1 | 52.2 | 54.1 |
| OTHER(SMELTERS & MISC.) | 8.6 | 8.3 | 8.5 | 10.9 | 12.9 | 10.6 | 9.6 | 8.8 |
| TOTAL | 73.7 | 78.7 | 76.7 | 90.2 | 89.6 | 124.8 | 145.7 | 174.8 |

TABLE 7. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY FUEL TYPE FOR VERMONT

| FUEL TYPE | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 11.8 | 16.9 | 21.3 | 25.4 | 26.8 | 25.3 | 21.4 | 16.2 | 17.8 | 22.3 |
| ANTHRACITE COAL | 20.0 | 27.1 | 29.3 | 30.7 | 31.0 | 23.1 | 8.0 | 6.1 | 10.1 | 10.8 |
| RESIDUAL OIL | .0* | .0* | .0* | .0* | .0* | .2 | .2 | .2 | .4* | .3* |
| DISTILLATE OIL | .0* | .0* | .0* | .0* | .0* | .2 | .4 | .5 | .6 | .5* |
| NATURAL GAS | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| WOOD | .1 | .1 | .1 | .1 | .1 | .1 | .1 | .1 | .1 | .1 |
| GASOLINE, DIESEL | .0* | .0* | .0* | .0* | .0* | .1* | .1* | .1* | .2* | .1* |
| OTHER | 2.6* | 2.6* | 2.6* | 2.6* | 2.6* | 2.7 | 2.7 | 2.7 | 2.7 | 2.5 |
| TOTAL | 34.6 | 46.7 | 53.3 | 58.8 | 60.4 | 51.7 | 32.9 | 25.9 | 31.8 | 36.7 |

*- MAY NOT INCLUDE ALL EMISSIONS BECAUSE DATUM WAS NOT AVAILABLE



TABLE 8 . SUMMARY OF NOX EMISSIONS (1000 TONS) BY FUEL TYPE FOR VERMONT

| FUEL TYPE | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 3.5 | 5.0 | 6.3 | 7.7 | 8.0 | 7.7 | 6.3 | 4.6 | 5.2 | 6.1 |
| ANTHRACITE COAL | 10.6 | 14.4 | 15.5 | 16.2 | 16.4 | 12.2 | 4.3 | 3.2 | 5.3 | 5.7 |
| RESIDUAL OIL | .0* | .0* | .0* | .0* | .0* | .1 | .1 | .1 | .1* | .1* |
| DISTILLATE OIL | .0* | .0* | .0* | .0* | .0* | .2 | .2 | .3 | .3 | .3* |
| NATURAL GAS | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| WOOD | .7 | .6 | .6 | .6 | .5 | .5 | .5 | .5 | .5 | .4 |
| GASOLINE, DIESEL | .0* | .0* | .0* | .2* | .7* | 1.5* | 2.8* | 3.1* | 4.2* | 3.2* |
| OTHER | 1.7* | 1.8* | 1.8* | 1.8* | 1.8* | 1.8 | 2.0 | 1.8 | 1.9 | 2.3 |
| TOTAL | 16.5 | 21.8 | 24.3 | 26.5 | 27.4 | 24.0 | 16.1 | 13.6 | 17.5 | 18.2 |

TABLE 9. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY FUEL TYPE FOR VERMONT

| FUEL TYPE | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 3.6 | 2.8 | 1.6 | 1.8 | 3.4 | .4 | .0 | .3 |
| ANTHRACITE COAL | 3.7 | 2.3 | .5 | .2 | .3 | .1 | .1 | .2 |
| RESIDUAL OIL | 1.2 | 1.0 | 2.2 | 4.2 | 4.0 | 1.9 | 4.4 | 2.3 |
| DISTILLATE OIL | 1.0 | .9 | 2.8 | 3.6 | 3.8 | 2.7 | 3.1 | 2.2 |
| NATURAL GAS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| WOOD | .1 | .1 | .1 | .0 | .0 | .0 | .1 | .1 |
| GASOLINE, DIESEL | .2 | .3 | .3 | .4 | .7 | .9 | 1.1 | 1.2 |
| OTHER(SMELTERS & MISC.) | 2.3 | 1.9 | 1.6 | 1.4 | 1.1 | .4 | .4 | .3 |
| TOTAL | 12.1 | 9.3 | 9.0 | 11.6 | 13.3 | 6.4 | 9.2 | 6.7 |



TABLE 10. SUMMARY OF NOX EMISSIONS (1000 TONS) BY FUEL TYPE FOR VERMONT

| FUEL TYPE | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | .7 | 1.1 | .4 | .5 | .6 | .1 | .0 | .1 |
| ANTHRACITE COAL | 2.0 | 1.2 | .2 | .1 | .2 | .0 | .0 | .1 |
| RESIDUAL OIL | .3 | .3 | .5 | .7 | .8 | .4 | .9 | .4 |
| DISTILLATE OIL | .9 | 1.3 | 3.0 | 2.5 | 3.2 | 2.1 | 2.4 | 1.7 |
| NATURAL GAS | .0 | .0 | .0 | .0 | .2 | .5 | .3 | .6 |
| WOOD | .7 | .6 | .6 | .5 | .5 | .5 | .9 | 1.1 |
| GASOLINE, DIESEL | 7.0 | 8.2 | 9.5 | 11.7 | 15.1 | 18.9 | 20.4 | 20.2 |
| OTHER(SMELTERS & MISC.) | 2.7 | 2.4 | 2.0 | 2.1 | 2.2 | 1.2 | 1.0 | .9 |
| TOTAL | 14.2 | 15.2 | 16.2 | 18.1 | 22.8 | 23.6 | 25.9 | 25.0 |

TABLE 7. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY FUEL TYPE FOR VIRGINIA

| FUEL TYPE | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 70.7 | 111.9 | 150.1 | 189.7 | 214.5 | 209.0 | 210.2 | 194.0 | 251.4 | 375.1 |
| ANTHRACITE COAL | 1.7 | 2.3 | 2.5 | 2.7 | 2.7 | 2.0 | 1.3 | 1.0 | 1.7 | 2.0 |
| RESIDUAL OIL | .0* | .0* | .0* | .0* | .0* | 13.3 | 15.0 | 13.4 | 14.9 | 32.0 |
| DISTILLATE OIL | .0* | .0* | .0* | .0* | .0* | .4 | .4 | .5 | .8 | 1.7 |
| NATURAL GAS | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| WOOD | .7 | .6 | .6 | .6 | .6 | .5 | .5 | .5 | .5 | .4 |
| GASOLINE, DIESEL | .0* | .0* | .0* | .0* | .1* | .3* | .5* | .7* | 1.0* | .9* |
| OTHER | 19.5* | 20.8* | 22.3* | 22.9* | 23.3* | 25.5 | 27.8 | 26.2* | 25.2* | 30.4* |
| TOTAL | 92.6 | 135.6 | 175.5 | 215.9 | 241.1 | 251.0 | 255.8 | 236.2 | 295.3 | 442.5 |

*- MAY NOT INCLUDE ALL EMISSIONS BECAUSE DATUM WAS NOT AVAILABLE



TABLE 8 . SUMMARY OF NOX EMISSIONS (1000 TONS) BY FUEL TYPE FOR VIRGINIA

| FUEL TYPE | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 17.8 | 27.9 | 37.7 | 47.8 | 53.6 | 53.0 | 52.6 | 48.6 | 65.5 | 95.2 |
| ANTHRACITE COAL | .9 | 1.2 | 1.3 | 1.4 | 1.4 | 1.1 | .7 | .5 | .9 | 1.1 |
| RESIDUAL OIL | .0* | .0* | .0* | .0* | .0* | 13.9 | 16.3 | 13.2 | 13.9 | 39.5 |
| DISTILLATE OIL | .0* | .0* | .0* | .0* | .0* | .9 | .8 | .7 | 1.3 | 3.5 |
| NATURAL GAS | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| WOOD | 5.0 | 4.8 | 4.6 | 4.4 | 4.2 | 4.0 | 3.8 | 3.6 | 3.5 | 3.3 |
| GASOLINE, DIESEL | .0* | .0* | .2* | 1.0* | 3.6* | 7.8* | 13.5* | 16.8* | 24.7* | 23.5* |
| OTHER | 16.4* | 17.2* | 18.1* | 18.4* | 18.7* | 20.1 | 34.1 | 17.8* | 16.6* | 24.2* |
| TOTAL | 40.2 | 51.2 | 61.9 | 73.0 | 81.5 | 100.7 | 121.8 | 101.3 | 126.4 | 190.2 |

TABLE 9. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY FUEL TYPE FOR VIRGINIA

| FUEL TYPE | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 297.1 | 248.1 | 280.6 | 331.1 | 243.9 | 108.5 | 132.2 | 166.0 |
| ANTHRACITE COAL | 1.7 | 1.0 | .3 | .6 | .2 | .5 | .6 | .2 |
| RESIDUAL OIL | 47.9 | 45.8 | 32.3 | 35.6 | 196.1 | 215.8 | 178.7 | 98.0 |
| DISTILLATE OIL | 2.5 | 7.3 | 13.0 | 14.8 | 17.0 | 13.7 | 15.1 | 12.4 |
| NATURAL GAS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .1 |
| WOOD | .7 | .6 | .5 | .4 | .3 | .3 | .5 | .6 |
| GASOLINE, DIESEL | 2.2 | 3.1 | 3.7 | 6.2 | 8.3 | 9.8 | 11.2 | 12.2 |
| OTHER(SMELTERS & MISC.) | 36.2 | 32.6 | 29.7 | 33.3 | 34.1 | 25.4 | 25.7 | 23.8 |
| TOTAL | 388.4 | 338.4 | 360.0 | 422.0 | 500.0 | 374.0 | 364.0 | 313.2 |



TABLE 10. SUMMARY OF NOX EMISSIONS (1000 TONS) BY FUEL TYPE FOR VIRGINIA

| FUEL TYPE | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 88.7 | 83.7 | 113.8 | 138.6 | 115.7 | 69.4 | 72.3 | 93.1 |
| ANTHRACITE COAL | .9 | .5 | .1 | .3 | .1 | .2 | .3 | .1 |
| RESIDUAL OIL | 10.3 | 15.0 | 10.1 | 8.7 | 33.1 | 43.9 | 41.9 | 29.1 |
| DISTILLATE OIL | 11.3 | 17.8 | 20.5 | 26.4 | 34.8 | 28.6 | 31.0 | 29.5 |
| NATURAL GAS | 1.7 | 9.2 | 15.8 | 23.8 | 17.9 | 10.6 | 10.8 | 28.3 |
| WOOD | 5.4 | 4.7 | 4.3 | 4.1 | 4.1 | 3.9 | 5.4 | 6.3 |
| GASOLINE, DIESEL | 53.9 | 73.1 | 89.5 | 124.1 | 170.7 | 200.2 | 209.7 | 198.7 |
| OTHER(SMELTERS & MISC.) | 33.9 | 31.1 | 28.7 | 37.8 | 44.2 | 30.8 | 29.6 | 26.0 |
| TOTAL | 206.2 | 235.2 | 282.7 | 363.9 | 420.6 | 387.8 | 401.0 | 411.1 |

TABLE 7. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY FUEL TYPE FOR WASHINGTON

| FUEL TYPE | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 27.4 | 42.9 | 58.5 | 74.8 | 82.4 | 72.2 | 60.8 | 47.2 | 49.8 | 66.1 |
| ANTHRACITE COAL | .0 | .0 | .0 | .0 | .0 | .0 | .0* | .0* | .0* | .0* |
| RESIDUAL OIL | .0* | .0* | .0* | .0* | .0* | 31.5 | 33.5 | 31.0 | 22.8 | 58.5 |
| DISTILLATE OIL | .0* | .0* | .0* | .0* | .0* | 3.6 | 3.5 | 3.2 | 2.1 | 4.8 |
| NATURAL GAS | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| WOOD | .6 | .6 | .5 | .5 | .5 | .5 | .4 | .4 | .4 | .4 |
| GASOLINE, DIESEL | .0* | .0* | .0* | .0* | .2* | .4* | .6* | .6* | .9* | .9* |
| OTHER | 8.2* | 11.1* | 13.9* | 15.1* | 16.6* | 18.1 | 20.0 | 17.6 | 39.0 | 33.4 |
| TOTAL | 36.2 | 54.6 | 72.9 | 90.4 | 99.7 | 126.3 | 118.9 | 100.0 | 115.0 | 164.1 |

*- MAY NOT INCLUDE ALL EMISSIONS BECAUSE DATUM WAS NOT AVAILABLE



TABLE 8 . SUMMARY OF NOX EMISSIONS (1000 TONS) BY FUEL TYPE FOR WASHINGTON

| FUEL TYPE | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 9.1 | 14.2 | 19.3 | 24.3 | 26.4 | 22.2 | 18.4 | 14.7 | 16.2 | 21.5 |
| ANTHRACITE COAL | .0 | .0 | .0 | .0 | .0 | .0 | .0* | .0* | .0* | .0* |
| RESIDUAL OIL | .0* | .0* | .0* | .0* | .0* | 23.1 | 26.1 | 21.5 | 12.3 | 32.5 |
| DISTILLATE OIL | .0* | .0* | .0* | .0* | .0* | 21.7 | 20.4 | 16.8 | 8.8 | 16.7 |
| NATURAL GAS | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| WOOD | 4.4 | 4.2 | 4.0 | 3.9 | 3.7 | 3.5 | 3.3 | 3.2 | 3.1 | 2.9 |
| GASOLINE, DIESEL | .0* | .0* | .2* | 1.2* | 4.4* | 9.4* | 15.0* | 15.9* | 22.0* | 21.9* |
| OTHER | 5.1* | 6.8* | 8.7* | 9.0* | 9.1* | 10.6 | 11.8 | 10.7 | 9.5 | 15.5 |
| TOTAL | 18.7 | 25.3 | 32.3 | 38.4 | 43.5 | 90.5 | 95.1 | 82.8 | 71.8 | 110.9 |

TABLE 9. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY FUEL TYPE FOR WASHINGTON

| FUEL TYPE | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 43.0 | 24.8 | 11.0 | 10.1 | 11.2 | 50.4 | 109.1 | 97.3 |
| ANTHRACITE COAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDUAL OIL | 42.3 | 65.9 | 46.5 | 36.3 | 52.0 | 37.5 | 41.8 | 58.3 |
| DISTILLATE OIL | 6.0 | 5.9 | 22.0 | 13.8 | 9.9 | 10.9 | 11.3 | 8.1 |
| NATURAL GAS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .1 |
| WOOD | .5 | .4 | .4 | .3 | .3 | .3 | .4 | .4 |
| GASOLINE, DIESEL | 2.5 | 3.0 | 3.5 | 4.2 | 5.7 | 6.4 | 9.0 | 9.4 |
| OTHER(SMELTERS & MISC.) | 105.8 | 102.8 | 91.6 | 94.9 | 95.8 | 86.2 | 120.4 | 105.9 |
| TOTAL | 200.1 | 202.7 | 175.0 | 159.6 | 174.9 | 191.8 | 292.1 | 279.5 |

TABLE 10. SUMMARY OF NOX EMISSIONS (1000 TONS) BY FUEL TYPE FOR WASHINGTON

| FUEL TYPE | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 12.6 | 7.3 | 7.0 | 5.8 | 4.2 | 48.3 | 62.4 | 65.3 |
| ANTHRACITE COAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDUAL OIL | 10.2 | 14.2 | 8.1 | 7.1 | 9.3 | 8.6 | 14.0 | 19.1 |
| DISTILLATE OIL | 22.4 | 14.1 | 17.1 | 18.0 | 11.9 | 20.7 | 27.9 | 20.6 |
| NATURAL GAS | .0 | .0 | 18.1 | 27.3 | 17.1 | 17.1 | 15.3 | 18.7 |
| WOOD | 4.6 | 4.5 | 4.3 | 4.8 | 4.8 | 4.6 | 5.9 | 5.6 |
| GASOLINE, DIESEL | 46.0 | 56.1 | 68.0 | 82.1 | 118.8 | 134.2 | 161.1 | 151.8 |
| OTHER(SMELTERS & MISC.) | 23.7 | 21.1 | 19.1 | 26.1 | 31.6 | 20.9 | 19.5 | 16.9 |
| TOTAL | 119.4 | 117.3 | 141.8 | 171.1 | 197.6 | 254.4 | 306.1 | 297.9 |

TABLE 7. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY FUEL TYPE FOR WEST VIRGINIA

| FUEL TYPE | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 65.9 | 108.2 | 154.2 | 203.2 | 239.2 | 256.5 | 245.2 | 201.7 | 253.5 | 348.4 |
| ANTHRACITE COAL | .4 | .5 | .5 | .5 | .6 | .4 | .0* | .0* | .0* | .0* |
| RESIDUAL OIL | .0* | .0* | .0* | .0* | .0* | 3.7 | 3.5 | 3.5 | 4.6 | 4.7 |
| DISTILLATE OIL | .0* | .0* | .0* | .0* | .0* | .1 | .1 | .1 | .2 | .3 |
| NATURAL GAS | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| WOOD | .2 | .2 | .2 | .1 | .1 | .1 | .1 | .1 | .1 | .1 |
| GASOLINE, DIESEL | .0* | .0* | .0* | .0* | .1* | .2* | .3* | .4* | .5* | .5* |
| OTHER | 17.5* | 25.2* | 35.1* | 49.6* | 36.5* | 69.0 | 44.0 | 38.6 | 25.1 | 31.4 |
| TOTAL | 83.9 | 134.0 | 190.0 | 253.6 | 276.5 | 330.0 | 293.3 | 244.5 | 284.0 | 385.3 |

*- MAY NOT INCLUDE ALL EMISSIONS BECAUSE DATUM WAS NOT AVAILABLE



TABLE 8 . SUMMARY OF NOX EMISSIONS (1000 TONS) BY FUEL TYPE FOR WEST VIRGINIA

| FUEL TYPE | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 16.5 | 26.9 | 38.3 | 50.7 | 59.9 | 67.2 | 64.5 | 53.0 | 68.8 | 93.1 |
| ANTHRACITE COAL | .2 | .3 | .3 | .3 | .3 | .2 | .0* | .0* | .0* | .0* |
| RESIDUAL OIL | .0* | .0* | .0* | .0* | .0* | 1.2 | 1.1 | 1.1 | 1.4 | 2.0 |
| DISTILLATE OIL | .0* | .0* | .0* | .0* | .0* | .1 | .1 | .1 | .7 | .3 |
| NATURAL GAS | .0* | .0* | 38.7* | 47.1* | 48.5* | 31.0* | 24.3* | 18.2* | 25.7* | 26.1* |
| WOOD | 1.3 | 1.2 | 1.2 | 1.1 | 1.1 | 1.0 | .9 | .9 | .9 | .8 |
| GASOLINE, DIESEL | .0* | .0* | .1* | .6* | 2.2* | 4.7* | 8.3* | 9.6* | 13.4* | 11.7* |
| OTHER | 6.3* | 7.0* | 7.7* | 7.7* | 7.7* | 9.1 | 16.8 | 8.4 | 7.3 | 10.8 |
| TOTAL | 24.3 | 35.4 | 86.3 | 107.5 | 119.7 | 114.5 | 116.1 | 91.2 | 118.1 | 144.8 |

TABLE 9. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY FUEL TYPE FOR WEST VIRGINIA

| FUEL TYPE | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 323.8 | 359.4 | 435.2 | 717.7 | 904.8 | 1425.5 | 1197.4 | 1150.4 |
| ANTHRACITE COAL | .0 | .0 | .0 | .0 | .0 | .5 | .2 | .1 |
| RESIDUAL OIL | 7.1 | 6.1 | 6.5 | 9.6 | 45.8 | 7.1 | 12.4 | 7.3 |
| DISTILLATE OIL | .7 | 1.4 | 2.0 | 1.8 | 1.9 | 3.3 | 4.8 | 5.4 |
| NATURAL GAS | .0 | .0 | .0 | .0 | .1 | .0 | .0 | .1 |
| WOOD | .2 | .1 | .1 | .1 | .1 | .1 | .2 | .2 |
| GASOLINE, DIESEL | 1.0 | 1.3 | 1.4 | 1.8 | 3.2 | 3.2 | 3.8 | 4.5 |
| OTHER(SMELTERS & MISC.) | 38.1 | 38.1 | 38.6 | 40.1 | 41.7 | 37.2 | 38.9 | 36.7 |
| TOTAL | 371.0 | 406.5 | 483.8 | 771.0 | 997.6 | 1476.8 | 1257.7 | 1204.8 |



TABLE 10. SUMMARY OF NOX EMISSIONS (1000 TONS) BY FUEL TYPE FOR WEST VIRGINIA

| FUEL TYPE | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 87.7 | 106.4 | 92.0 | 158.2 | 212.2 | 336.5 | 323.9 | 373.2 |
| ANTHRACITE COAL | .0 | .0 | .0 | .0 | .0 | .2 | .1 | .1 |
| RESIDUAL OIL | 1.7 | 1.5 | 1.6 | 2.3 | 6.8 | 1.4 | 2.9 | 1.7 |
| DISTILLATE OIL | 1.1 | 4.6 | 9.2 | 6.5 | 8.6 | 11.5 | 16.8 | 17.3 |
| NATURAL GAS | 39.3 | 45.5 | 44.3 | 50.0 | 23.5 | 28.3 | 28.5 | 33.4 |
| WOOD | 1.4 | 1.2 | 1.0 | .9 | .8 | .9 | 1.4 | 1.8 |
| GASOLINE, DIESEL | 25.9 | 30.9 | 34.1 | 41.7 | 56.6 | 63.5 | 67.4 | 67.7 |
| OTHER(SMELTERS & MISC.) | 16.0 | 12.7 | 11.3 | 11.5 | 9.6 | 5.2 | 4.7 | 4.5 |
| TOTAL | 173.0 | 202.8 | 193.6 | 271.0 | 318.1 | 447.5 | 445.8 | 499.7 |

TABLE 7. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY FUEL TYPE FOR WISCONSIN

| FUEL TYPE | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 215.4 | 309.5 | 394.6 | 477.3 | 547.9 | 608.7 | 576.8 | 466.1 | 536.0 | 697.3 |
| ANTHRACITE COAL | 17.6 | 23.9 | 25.7 | 27.0 | 27.2 | 20.3 | 4.3 | 3.3 | 5.4 | 7.3 |
| RESIDUAL OIL | .0* | .0* | .0* | .0* | .0* | 4.0 | 3.6 | 3.5 | 3.1 | 5.1 |
| DISTILLATE OIL | .0* | .0* | .0* | .0* | .0* | .4* | .4* | .5* | .9 | 1.5 |
| NATURAL GAS | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| WOOD | .5 | .4 | .4 | .4 | .4 | .4 | .3 | .3 | .3 | .3 |
| GASOLINE, DIESEL | .0* | .0* | .0* | .1* | .3* | .6* | 1.0* | 1.0* | 1.3* | 1.2* |
| OTHER | 22.2* | 23.9* | 25.6* | 26.3* | 26.9* | 30.2 | 32.9 | 30.8 | 28.8 | 33.9 |
| TOTAL | 255.7 | 357.7 | 446.4 | 531.1 | 602.6 | 664.5 | 619.4 | 505.4 | 575.9 | 746.6 |

*- MAY NOT INCLUDE ALL EMISSIONS BECAUSE DATUM WAS NOT AVAILABLE



TABLE 8 . SUMMARY OF NOX EMISSIONS (1000 TONS) BY FUEL TYPE FOR WISCONSIN

| FUEL TYPE | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 26.9 | 38.6 | 49.2 | 59.6 | 70.4 | 82.1 | 77.4 | 63.2 | 75.7 | 97.6 |
| ANTHRACITE COAL | 9.3 | 12.6 | 13.6 | 14.3 | 14.4 | 10.8 | 2.3 | 1.7 | 2.9 | 3.9 |
| RESIDUAL OIL | .0* | .0* | .0* | .0* | .0* | 1.0 | .9 | .9 | .8 | 1.3 |
| DISTILLATE OIL | .0* | .0* | .0* | .0* | .0* | .6* | .6* | .6* | 1.2 | 2.7 |
| NATURAL GAS | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| WOOD | 3.4 | 3.2 | 3.1 | 3.0 | 2.8 | 2.7 | 2.6 | 2.5 | 2.4 | 2.2 |
| GASOLINE, DIESEL | .0* | .1* | .4* | 1.9* | 6.7* | 14.5* | 25.7* | 25.2* | 32.8* | 29.8* |
| OTHER | 19.2* | 19.9* | 20.7* | 20.8* | 20.9* | 22.7 | 28.0 | 15.0 | 13.7 | 19.9 |
| TOTAL | 58.8 | 74.4 | 87.0 | 99.6 | 115.3 | 134.4 | 137.4 | 109.0 | 129.4 | 157.3 |

TABLE 9. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY FUEL TYPE FOR WISCONSIN

| FUEL TYPE | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 393.6 | 388.2 | 520.4 | 621.4 | 835.1 | 630.1 | 673.9 | 609.7 |
| ANTHRACITE COAL | 11.9 | 4.6 | 1.0 | .3 | .2 | .1 | .0 | .0 |
| RESIDUAL OIL | 4.4 | 4.7 | 20.2 | 14.7 | 15.7 | 10.9 | 10.8 | 7.4 |
| DISTILLATE OIL | 3.6 | 4.9 | 20.2 | 22.4 | 21.2 | 15.7 | 18.1 | 10.6 |
| NATURAL GAS | .0 | .0 | .0 | .1 | .1 | .1 | .1 | .2 |
| WOOD | .5 | .4 | .3 | .3 | .2 | .3 | .4 | .5 |
| GASOLINE, DIESEL | 2.3 | 2.9 | 3.2 | 4.5 | 7.3 | 8.3 | 10.9 | 10.6 |
| OTHER(SMELTERS & MISC.) | 39.5 | 37.0 | 35.2 | 37.1 | 37.4 | 29.0 | 29.7 | 27.7 |
| TOTAL | 455.8 | 442.7 | 600.5 | 700.8 | 917.2 | 694.4 | 744.0 | 666.7 |



TABLE 10. SUMMARY OF NOX EMISSIONS (1000 TONS) BY FUEL TYPE FOR WISCONSIN

| FUEL TYPE | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 62.5 | 69.4 | 112.3 | 138.2 | 176.4 | 152.9 | 158.9 | 185.3 |
| ANTHRACITE COAL | 6.3 | 2.4 | .5 | .2 | .1 | .0 | .0 | .0 |
| RESIDUAL OIL | 1.1 | 1.3 | 3.7 | 2.7 | 2.8 | 1.9 | 2.4 | 2.0 |
| DISTILLATE OIL | 7.3 | 11.5 | 17.9 | 17.4 | 18.5 | 16.2 | 21.1 | 15.6 |
| NATURAL GAS | 2.6 | 5.7 | 15.6 | 36.5 | 29.3 | 31.1 | 25.2 | 50.3 |
| WOOD | 3.6 | 3.2 | 3.0 | 2.9 | 2.8 | 3.3 | 4.8 | 5.3 |
| GASOLINE, DIESEL | 56.7 | 70.0 | 81.6 | 103.3 | 148.1 | 166.9 | 189.7 | 167.1 |
| OTHER(SMELTERS & MISC.) | 27.6 | 24.1 | 22.5 | 25.0 | 27.9 | 16.2 | 14.0 | 12.5 |
| TOTAL | 167.7 | 187.7 | 257.0 | 326.2 | 405.9 | 388.5 | 416.1 | 438.1 |

TABLE 7. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY FUEL TYPE FOR WYOMING

| FUEL TYPE | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 16.6 | 20.7 | 22.3 | 21.8 | 21.5 | 20.6 | 18.2 | 13.8 | 14.7 | 18.7 |
| ANTHRACITE COAL | .0 | .0 | .0 | .0 | .0 | .0 | .0* | .0* | .0* | .0* |
| RESIDUAL OIL | .0* | .0* | .0* | .0* | .0* | 3.8 | 3.7 | 3.7 | 4.7 | 18.5 |
| DISTILLATE OIL | .0* | .0* | .0* | .0* | .0* | 1.8* | 1.7* | 1.5* | 1.5* | 3.9* |
| NATURAL GAS | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| WOOD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| GASOLINE, DIESEL | .0* | .0* | .0* | .0* | .0* | .0* | .1* | .1* | .1* | .1* |
| OTHER | 11.7* | 8.6* | 9.6* | 10.5* | 10.6* | 11.8 | 12.7 | 12.8 | 13.0 | 16.9 |
| TOTAL | 28.3 | 29.4 | 31.9 | 32.3 | 32.1 | 38.1 | 36.5 | 31.9 | 34.1 | 58.1 |

*- MAY NOT INCLUDE ALL EMISSIONS BECAUSE DATUM WAS NOT AVAILABLE



TABLE 8 . SUMMARY OF NOX EMISSIONS (1000 TONS) BY FUEL TYPE FOR WYOMING

| FUEL TYPE | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 6.2 | 7.8 | 8.4 | 8.4 | 8.4 | 8.1 | 7.0 | 5.3 | 6.1 | 7.7 |
| ANTHRACITE COAL | .0 | .0 | .0 | .0 | .0 | .0 | .0* | .0* | .0* | .0* |
| RESIDUAL OIL | .0* | .0* | .0* | .0* | .0* | .6 | .6 | .6 | .8 | 2.0 |
| DISTILLATE OIL | .0* | .0* | .0* | .0* | .0* | 11.8* | 11.1* | 9.1* | 8.9* | 17.6* |
| NATURAL GAS | .0* | .0* | .0* | .0* | 5.6* | 25.2* | 21.8* | 4.4* | 6.2* | 6.4* |
| WOOD | .2 | .2 | .2 | .1 | .1 | .1 | .1 | .1 | .1 | .1 |
| GASOLINE, DIESEL | 0* | .0* | .0* | .1* | .4* | .8* | 1.4* | 1.8* | 2.6* | 2.3* |
| OTHER | .9* | 1.0* | 1.2* | 1.3* | 1.3* | 1.6 | 1.9 | 2.7 | 3.6 | 2.4 |
| TOTAL | 7.2 | 8.9 | 9.8 | 10.0 | 15.8 | 48.2 | 43.9 | 24.0 | 28.2 | 38.5 |

TABLE 9. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY FUEL TYPE FOR WYOMING

| FUEL TYPE | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 11.4 | 10.5 | 24.2 | 52.8 | 42.7 | 85.4 | 136.1 | 192.6 |
| ANTHRACITE COAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDUAL OIL | 9.9 | 7.9 | 5.2 | 5.4 | 7.1 | 9.3 | 15.2 | 11.2 |
| DISTILLATE OIL | 3.8 | 4.1 | 4.0 | 4.1 | 4.9 | 5.2 | 6.5 | 8.7 |
| NATURAL GAS | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| WOOD | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| GASOLINE, DIESEL | .5 | .6 | 1.0 | 1.3 | 1.6 | 2.3 | 3.4 | 3.7 |
| OTHER(SMELTERS & MISC.) | 20.9 | 22.4 | 24.0 | 26.4 | 28.6 | 26.7 | 28.0 | 26.5 |
| TOTAL | 46.6 | 45.5 | 58.3 | 90.0 | 84.9 | 128.9 | 189.2 | 242.7 |



TABLE 10. SUMMARY OF NOX EMISSIONS (1000 TONS) BY FUEL TYPE FOR WYOMING

| FUEL TYPE | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 5.2 | 5.8 | 11.0 | 24.9 | 43.5 | 89.3 | 147.8 | 206.9 |
| ANTHRACITE COAL | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| RESIDUAL OIL | 1.6 | 1.3 | .7 | .9 | .9 | 1.9 | 2.6 | 2.4 |
| DISTILLATE OIL | 19.1 | 17.3 | 19.1 | 19.7 | 21.7 | 19.5 | 23.5 | 35.3 |
| NATURAL GAS | 11.1 | 24.6 | 16.3 | 16.4 | 62.1 | 29.8 | 38.1 | 33.3 |
| WOOD | .2 | .1 | .1 | .1 | .1 | .1 | .2 | .2 |
| GASOLINE, DIESEL | 8.4 | 10.8 | 15.8 | 19.1 | 21.8 | 31.4 | 43.2 | 45.2 |
| OTHER(SMELTERS & MISC.) | 3.4 | 3.6 | 3.8 | 4.0 | 5.6 | 4.7 | 4.0 | 4.1 |
| TOTAL | 49.0 | 63.5 | 66.8 | 85.0 | 155.7 | 176.8 | 259.3 | 327.5 |

TABLE 7. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY FUEL TYPE FOR THE U.S.

| FUEL TYPE | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 7349.6 | 10488.1 | 13264.3 | 15835.7 | 17060.4 | 17159.1 | 15624.2 | 12318.3 | 14244.0 | 18774.0 |
| ANTHRACITE COAL | 783.5 | 1061.4 | 1144.8 | 1200.2 | 1210.8 | 904.2 | 472.4 | 356.9 | 593.9 | 603.7 |
| RESIDUAL OIL | .0 | .0 | .0 | .0 | .0 | 1273.9 | 1327.5 | 1222.2 | 1260.2 | 2142.0 |
| DISTILLATE OIL | .0 | .0 | .0 | .0 | .0 | 134.6 | 137.0 | 133.1 | 148.3 | 275.6 |
| NATURAL GAS | .0 | .0 | .2 | .2 | .2 | .4 | .6 | .5 | .8 | 1.3 |
| WOOD | 15.1 | 14.4 | 13.8 | 13.2 | 12.6 | 12.0 | 11.4 | 10.9 | 10.6 | 9.8 |
| GASOLINE, DIESEL | .0 | .1 | .5 | 2.8 | 9.8 | 21.1 | 35.6 | 39.6 | 53.0 | 46.1 |
| OTHER | 1840.1 | 2396.1 | 2851.3 | 3238.2 | 2850.6 | 3757.8 | 3497.9 | 2896.3 | 4208.3 | 4154.8 |
| TOTAL | 9988.4 | 13960.0 | 17274.9 | 20290.2 | 21144.4 | 23263.1 | 21106.4 | 16977.8 | 20519.1 | 26007.3 |



TABLE 8 . SUMMARY OF NOX EMISSIONS (1000 TONS) BY FUEL TYPE FOR THE U.S.

| FUEL TYPE | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 1176.7 | 1690.7 | 2155.8 | 2595.8 | 2830.3 | 2912.8 | 2597.0 | 2035.0 | 2429.2 | 3125.1 |
| ANTHRACITE COAL | 414.4 | 561.3 | 605.4 | 634.7 | 640.3 | 478.2 | 249.8 | 188.8 | 314.1 | 319.3 |
| RESIDUAL OIL | .0 | .0 | .0 | .0 | .0 | 882.0 | 1001.9 | 826.5 | 762.3 | 1158.8 |
| DISTILLATE OIL | .0 | .0 | .0 | .0 | .0 | 720.3 | 680.1 | 566.0 | 563.3 | 1046.6 |
| NATURAL GAS | .0 | .0 | 220.5 | 260.3 | 327.0 | 567.7 | 906.6 | 697.3 | 982.1 | 1372.7 |
| WOOD | 113.5 | 107.9 | 103.3 | 98.8 | 94.2 | 89.7 | 85.2 | 81.7 | 79.5 | 73.8 |
| GASOLINE, DIESEL | .3 | 2.1 | 13.9 | 71.2 | 249.0 | 535.6 | 902.8 | 1005.4 | 1345.3 | 1170.0 |
| OTHER | 905.6 | 951.9 | 1003.5 | 1012.0 | 1018.4 | 1115.7 | 1594.5 | 1237.2 | 1082.0 | 1281.3 |
| TOTAL | 2610.4 | 3313.9 | 4102.4 | 4672.9 | 5159.3 | 7302.0 | 8017.8 | 6637.9 | 7557.9 | 9547.6 |

TABLE 9. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY FUEL TYPE FOR THE U.S.

| FUEL TYPE | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 13258.4 | 12754.6 | 13946.4 | 17277.1 | 20472.3 | 20505.8 | 18363.8 | 19500.2 |
| ANTHRACITE COAL | 572.7 | 359.9 | 246.7 | 178.7 | 129.0 | 80.2 | 85.4 | 61.3 |
| RESIDUAL OIL | 1782.5 | 1871.1 | 2086.1 | 2273.8 | 3726.6 | 3340.0 | 3778.1 | 3193.4 |
| DISTILLATE OIL | 317.4 | 341.7 | 616.3 | 576.6 | 581.2 | 582.5 | 662.3 | 472.2 |
| NATURAL GAS | 2.2 | 3.0 | 3.9 | 4.9 | 6.3 | 5.9 | 5.8 | 6.3 |
| WOOD | 14.8 | 12.0 | 10.2 | 8.7 | 8.4 | 8.9 | 12.5 | 14.9 |
| GASOLINE, DIESEL | 110.3 | 141.6 | 168.6 | 230.9 | 329.6 | 397.3 | 500.1 | 509.2 |
| OTHER(SMELTERS & MISC.) | 5145.1 | 5399.6 | 5191.3 | 6199.6 | 6692.9 | 4599.5 | 3840.5 | 3439.3 |
| TOTAL | 21203.4 | 20883.4 | 22269.5 | 26750.3 | 31946.3 | 29520.0 | 27248.5 | 27196.8 |

TABLE 10. SUMMARY OF NOX EMISSIONS (1000 TONS) BY FUEL TYPE FOR THE U.S.

| FUEL TYPE | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| BITUMINOUS COAL | 2332.1 | 2573.1 | 3065.6 | 3914.6 | 4686.6 | 5422.8 | 5877.4 | 7155.5 |
| ANTHRACITE COAL | 302.9 | 190.4 | 130.4 | 94.5 | 68.2 | 42.4 | 45.2 | 32.4 |
| RESIDUAL OIL | 477.1 | 515.6 | 516.9 | 510.0 | 804.6 | 938.4 | 1182.1 | 1015.7 |
| DISTILLATE OIL | 977.1 | 912.6 | 1000.3 | 998.2 | 1063.1 | 1159.1 | 1289.9 | 1139.0 |
| NATURAL GAS | 2074.0 | 2850.0 | 3852.6 | 4751.4 | 4491.3 | 4079.7 | 4304.9 | 3893.9 |
| WOOD | 121.1 | 108.2 | 99.2 | 98.5 | 104.6 | 109.6 | 149.5 | 164.4 |
| GASOLINE, DIESEL | 2397.8 | 3060.6 | 3767.9 | 4806.6 | 6596.8 | 7735.9 | 8598.3 | 8011.8 |
| OTHER(SMELTERS & MISC.) | 1626.5 | 1352.4 | 1177.2 | 1405.4 | 1587.3 | 1012.9 | 966.6 | 846.0 |
| TOTAL | 10308.6 | 11562.8 | 13610.1 | 16579.2 | 19402.5 | 20500.9 | 22413.9 | 22258.8 |

# SECTION 5.0

# STATE SUMMARY BY SOURCE CATEGORY

TABLE 11. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR ALABAMA

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 3.5* | 5.7* | 7.9* | 10.5* | 12.6* | 14.8 | 17.6 | 16.5 | 32.4 | 56.2 |
| INDUSTRIAL | 30.5* | 43.6* | 56.6* | 70.3* | 74.3* | 86.0 | 68.2 | 48.9 | 53.0 | 57.1 |
| COMMERCIAL-RESIDENTIAL | 9.0* | 13.5* | 18.4* | 25.3* | 26.9* | 30.9* | 32.4* | 24.9* | 24.8* | 32.7* |
| PIPELINES | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| HIGHWAY VEHICLES | .0* | .0* | .0* | .0* | .1* | .2 | .4* | .4* | .6* | .7* |
| OTHER | 59.3 | 75.5 | 90.2 | 99.5 | 110.2 | 113.8 | 111.3 | 98.7 | 102.7 | 144.6 |
| TOTAL | 102.3 | 138.4 | 173.1 | 205.5 | 224.2 | 245.7 | 229.9 | 189.5 | 213.5 | 291.2 |

*- MAY NOT INCLUDE ALL EMISSIONS BECAUSE DATUM WAS NOT AVAILABLE



TABLE 12. SUMMARY OF NOX EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR ALABAMA

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 1.0* | 1.6* | 2.2* | 2.9* | 3.5* | 4.1 | 4.9 | 4.8 | 9.2 | 17.3 |
| INDUSTRIAL | 9.8* | 13.9* | 18.1* | 22.4* | 23.7* | 26.1 | 21.3 | 21.9 | 25.6 | 32.9 |
| COMMERCIAL-RESIDENTIAL | .7* | 1.0* | 1.4* | 1.9* | 2.1* | 2.4* | 2.5* | 2.0* | 2.1* | 3.0* |
| PIPELINES | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| HIGHWAY VEHICLES | .0* | .0* | .2* | .8* | 2.9* | 6.3 | 10.1* | 10.2* | 15.4* | 16.9* |
| OTHER | 80.8 | 83.8 | 86.5 | 87.8 | 89.4 | 102.2 | 72.6 | 75.9 | 51.8 | 68.5 |
| TOTAL | 92.2 | 100.4 | 108.4 | 115.9 | 121.5 | 141.1 | 111.4 | 114.8 | 104.2 | 138.6 |

TABLE 13. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR ALABAMA

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 41.8 | 204.3 | 311.6 | 539.3 | 758.1 | 884.9 | 491.8 | 560.2 |
| INDUSTRIAL | 80.8 | 84.0 | 53.8 | 116.4 | 94.9 | 126.9 | 177.0 | 139.4 |
| COMMERCIAL - RESIDENTIAL | 24.1 | 16.8 | 9.9 | 4.2 | 5.5 | 23.9 | 24.3 | 9.6 |
| PIPELINES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| HIGHWAY VEHICLES | 1.5 | 2.0 | 2.5 | 3.4 | 4.9 | 7.1 | 9.3 | 10.2 |
| OTHER | 107.6 | 79.8 | 70.6 | 70.6 | 74.7 | 73.9 | 78.2 | 68.6 |
| TOTAL | 255.8 | 386.9 | 448.5 | 733.9 | 938.2 | 1116.7 | 780.7 | 788.0 |

TABLE 14. SUMMARY OF NOX EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR ALABAMA

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 15.6 | 60.9 | 85.8 | 145.7 | 185.1 | 223.9 | 162.2 | 212.0 |
| INDUSTRIAL | 42.9 | 53.0 | 47.0 | 70.9 | 42.1 | 41.4 | 54.5 | 46.5 |
| COMMERCIAL - RESIDENTIAL | 5.8 | 5.8 | 6.6 | 6.2 | 7.0 | 8.6 | 9.4 | 6.9 |
| PIPELINES | 3.0 | 7.9 | 9.5 | 15.0 | 25.1 | 23.5 | 17.8 | 33.1 |
| HIGHWAY VEHICLES | 35.5 | 49.9 | 64.0 | 82.1 | 101.5 | 142.3 | 163.6 | 156.8 |
| OTHER | 51.7 | 46.9 | 49.5 | 48.3 | 61.9 | 63.1 | 82.3 | 53.7 |
| TOTAL | 154.4 | 224.4 | 262.3 | 368.2 | 422.6 | 502.7 | 489.7 | 508.8 |

TABLE 11. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR ARIZONA

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | .0* | .0* | .0* | .0* | .0* | 2.4 | 1.9 | 1.7 | 2.1 | .7 |
| INDUSTRIAL | .2* | .3* | .4* | .6* | 1.6* | 13.0 | 12.5 | 11.7 | 7.7 | 8.9* |
| COMMERCIAL-RESIDENTIAL | .3* | .5* | .8* | 1.3* | 1.4* | 1.8* | 1.9* | 1.6* | 1.6* | 1.8* |
| PIPELINES | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| HIGHWAY VEHICLES | .0* | .0* | .0* | .0* | .0* | .1 | .2 | .2 | .2 | .3 |
| OTHER | 134.4 | 258.5 | 343.2 | 471.7 | 552.0 | 737.9 | 555.0 | 325.1 | 658.2 | 649.0 |
| TOTAL | 134.8 | 259.4 | 344.4 | 473.6 | 555.1 | 755.2 | 571.5 | 340.2 | 669.8 | 660.7 |

*- MAY NOT INCLUDE ALL EMISSIONS BECAUSE DATUM WAS NOT AVAILABLE



TABLE 12. SUMMARY OF NOX EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR ARIZONA

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | .0* | .0* | .0* | .0* | .0* | .9 | .7 | 1.1 | 1.4 | .8 |
| INDUSTRIAL | .1* | .2* | .2* | .3* | .9* | 3.5 | 3.4 | 7.5 | 8.6 | 9.7* |
| COMMERCIAL-RESIDENTIAL | .0* | .1* | .1* | .2* | .2* | .3* | .3* | .3* | .3* | .6* |
| PIPELINES | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| HIGHWAY VEHICLES | .0* | .0* | .0* | .2* | .8* | 1.7 | 4.1 | 4.1 | 6.0 | 6.5 |
| OTHER | 2.5 | 3.6 | 4.8 | 5.6 | 6.2 | 24.5 | 23.2 | 19.7 | 20.2 | 20.6 |
| TOTAL | 2.7 | 3.8 | 5.2 | 6.4 | 8.1 | 30.9 | 31.7 | 32.7 | 36.6 | 38.2 |

TABLE 13. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR ARIZONA

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | .1 | .2 | .1 | 8.5 | 4.0 | 48.1 | 64.1 | 84.7 |
| INDUSTRIAL | 4.9 | 4.9 | 6.9 | 6.5 | 6.8 | 10.3 | 17.1 | 15.0 |
| COMMERCIAL - RESIDENTIAL | 1.1 | 1.1 | .7 | 1.3 | .3 | .8 | 1.4 | .4 |
| PIPELINES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| HIGHWAY VEHICLES | .8 | 1.0 | 1.4 | 1.8 | 3.9 | 4.9 | 6.4 | 6.8 |
| OTHER | 1083.8 | 1211.6 | 1437.1 | 1861.1 | 2250.7 | 1375.1 | 825.7 | 686.2 |
| TOTAL | 1090.6 | 1218.8 | 1446.2 | 1879.2 | 2265.7 | 1439.2 | 914.7 | 793.1 |

TABLE 14. SUMMARY OF NOX EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR ARIZONA

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 3.4 | 5.9 | 13.1 | 12.9 | 20.0 | 60.2 | 107.0 | 158.8 |
| INDUSTRIAL | 16.3 | 19.5 | 6.9 | 19.7 | 6.8 | 8.4 | 12.5 | 12.0 |
| COMMERCIAL - RESIDENTIAL | 1.2 | 1.5 | 3.0 | 2.7 | 3.0 | 4.2 | 4.0 | 3.4 |
| PIPELINES | 3.8 | 10.7 | 19.9 | 22.5 | 29.9 | 21.4 | 19.0 | 26.7 |
| HIGHWAY VEHICLES | 15.6 | 21.9 | 32.7 | 41.7 | 72.9 | 93.1 | 107.2 | 102.1 |
| OTHER | 20.4 | 9.5 | 18.7 | 24.9 | 22.9 | 17.5 | 26.3 | 23.5 |
| TOTAL | 60.8 | 69.0 | 94.2 | 124.5 | 155.5 | 204.8 | 275.9 | 326.4 |

TABLE 11. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR ARKANSAS

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 2.3* | 3.8* | 5.2* | 6.9* | 8.2* | 9.3 | 8.0 | 4.7 | 5.8 | 6.2 |
| INDUSTRIAL | 10.4* | 14.9* | 19.5* | 24.3* | 22.4* | 18.8 | 12.8 | 9.0 | 8.4 | 6.8 |
| COMMERCIAL-RESIDENTIAL | 6.8* | 10.2* | 14.0* | 19.2* | 20.5* | 24.2* | 24.2* | 17.4* | 14.4* | 13.9* |
| PIPELINES | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| HIGHWAY VEHICLES | .0* | .0* | .0* | .0* | .1* | .2 | .3* | .3* | .4* | .5* |
| OTHER | 60.3 | 82.7 | 102.5 | 114.9 | 134.6 | 122.6 | 100.1 | 77.7 | 96.8 | 111.9 |
| TOTAL | 79.8 | 111.6 | 141.1 | 165.3 | 185.8 | 175.1 | 145.5 | 109.2 | 125.9 | 139.2 |

*- MAY NOT INCLUDE ALL EMISSIONS BECAUSE DATUM WAS NOT AVAILABLE



TABLE 12. SUMMARY OF NOX EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR ARKANSAS

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | .3* | .6* | .8* | 1.0* | 1.3* | 1.6 | 1.7 | 1.2 | 1.5 | 2.9 |
| INDUSTRIAL | 1.6* | 2.3* | 3.0* | 3.8* | 11.7* | 30.0 | 18.9 | 11.0 | 14.5 | 32.5 |
| COMMERCIAL-RESIDENTIAL | .3* | .5* | .6* | .9* | 1.2* | 1.5* | 1.7* | 1.3* | 1.4* | 1.7* |
| PIPELINES | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| HIGHWAY VEHICLES | .0* | .0* | .1* | .6* | 2.1* | 4.6 | 7.9* | 7.8* | 11.0* | 11.8* |
| OTHER | 155.7 | 157.8 | 159.9 | 160.8 | 161.4 | 175.5 | 120.7 | 53.5 | 50.9 | 39.6 |
| TOTAL | 158.0 | 161.1 | 164.4 | 167.2 | 177.8 | 213.1 | 151.0 | 74.8 | 79.4 | 88.5 |

TABLE 13. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR ARKANSAS

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 1.0 | .4 | .5 | .1 | 9.2 | 16.0 | 64.0 | 38.3 |
| INDUSTRIAL | 3.2 | 6.6 | 6.9 | 7.2 | 5.7 | 23.2 | 36.8 | 28.9 |
| COMMERCIAL - RESIDENTIAL | 2.3 | 1.8 | .6 | .6 | 1.2 | 10.1 | 4.0 | 3.2 |
| PIPELINES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| HIGHWAY VEHICLES | 1.0 | 1.3 | 1.4 | 2.0 | 3.5 | 4.6 | 6.2 | 6.2 |
| OTHER | 73.8 | 45.2 | 18.7 | 16.1 | 14.9 | 12.4 | 12.3 | 11.6 |
| TOTAL | 81.3 | 55.2 | 28.2 | 26.0 | 34.5 | 66.4 | 123.4 | 88.1 |

TABLE 14. SUMMARY OF NOX EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR ARKANSAS

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 5.1 | 11.5 | 11.6 | 16.1 | 28.1 | 13.0 | 39.6 | 57.3 |
| INDUSTRIAL | 42.6 | 57.1 | 41.4 | 50.7 | 14.0 | 16.5 | 20.3 | 18.0 |
| COMMERCIAL - RESIDENTIAL | 4.4 | 4.1 | 4.3 | 4.5 | 6.2 | 6.9 | 6.1 | 5.1 |
| PIPELINES | 7.1 | 11.6 | 17.2 | 21.4 | 28.3 | 15.3 | 20.5 | 16.8 |
| HIGHWAY VEHICLES | 25.1 | 32.4 | 39.8 | 53.0 | 68.8 | 86.0 | 100.1 | 92.6 |
| OTHER | 43.4 | 26.1 | 27.4 | 25.9 | 29.2 | 33.6 | 33.7 | 31.8 |
| TOTAL | 127.6 | 142.8 | 141.7 | 171.6 | 174.5 | 171.3 | 220.4 | 221.6 |

TABLE 11. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR CALIFORNIA

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | .0* | .0* | .0* | .0* | .0* | 3.2 | 2.5 | 2.2 | 1.3 | 7.0 |
| INDUSTRIAL | 5.2* | 7.9* | 7.7* | 13.1* | 13.6* | 82.0 | 70.1 | 71.7 | 105.6 | 128.7 |
| COMMERCIAL-RESIDENTIAL | 2.6* | 3.5* | 4.3* | 5.3* | 5.4* | 28.2* | 43.4* | 64.1* | 73.9* | 333.0* |
| PIPELINES | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| HIGHWAY VEHICLES | .0* | .0* | .0* | .2* | .8* | 1.8 | 2.8* | 3.2* | 4.3* | 4.4* |
| OTHER | 132.1 | 145.9 | 194.8 | 194.5 | 172.5 | 389.2 | 395.7 | 312.5 | 298.4 | 408.9 |
| TOTAL | 140.0 | 157.3 | 206.8 | 213.2 | 192.3 | 504.3 | 514.6 | 453.7 | 483.5 | 881.9 |

*- MAY NOT INCLUDE ALL EMISSIONS BECAUSE DATUM WAS NOT AVAILABLE



TABLE 12. SUMMARY OF NOX EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR CALIFORNIA

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | .0* | .0* | .0* | .0* | 1.2* | 4.2 | 7.8 | 3.6 | 4.1 | 12.3 |
| INDUSTRIAL | 2.6* | 3.6* | 19.0* | 15.9* | 37.2* | 116.3 | 167.7 | 98.1 | 138.1 | 159.4 |
| COMMERCIAL-RESIDENTIAL | .6* | .7* | .9* | 1.3* | 1.7* | 4.5* | 7.6* | 9.7* | 12.1* | 39.3* |
| PIPELINES | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| HIGHWAY VEHICLES | .0* | .2* | 1.2* | 6.1* | 21.5* | 46.2 | 71.9* | 82.8* | 108.9* | 111.4* |
| OTHER | 45.7 | 53.1 | 59.1 | 60.4 | 61.9 | 453.6 | 491.5 | 397.5 | 362.9 | 566.7 |
| TOTAL | 48.9 | 57.6 | 80.2 | 83.8 | 123.6 | 624.9 | 746.4 | 591.5 | 626.0 | 889.1 |

TABLE 13. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR CALIFORNIA

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 26.4 | 46.8 | 56.1 | 39.5 | 40.6 | 114.0 | 80.2 | 85.0 |
| INDUSTRIAL | 153.5 | 172.4 | 128.5 | 142.3 | 161.0 | 104.0 | 119.7 | 128.9 |
| COMMERCIAL - RESIDENTIAL | 120.5 | 106.1 | 33.3 | 11.4 | 55.3 | 25.7 | 22.9 | 41.6 |
| PIPELINES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| HIGHWAY VEHICLES | 10.9 | 12.1 | 15.4 | 21.3 | 31.1 | 33.9 | 44.4 | 44.7 |
| OTHER | 281.3 | 244.3 | 227.5 | 271.7 | 271.9 | 220.7 | 265.0 | 274.0 |
| TOTAL | 592.6 | 581.8 | 460.9 | 486.2 | 560.0 | 498.4 | 532.3 | 574.2 |



TABLE 14. SUMMARY OF NOX EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR CALIFORNIA

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 32.5 | 68.5 | 107.5 | 152.2 | 176.3 | 166.8 | 171.6 | 219.8 |
| INDUSTRIAL | 200.6 | 265.3 | 194.2 | 216.0 | 86.4 | 74.8 | 77.6 | 80.2 |
| COMMERCIAL - RESIDENTIAL | 28.4 | 14.6 | 29.6 | 36.2 | 47.7 | 50.8 | 46.6 | 50.6 |
| PIPELINES | 6.5 | 11.2 | 13.2 | 19.6 | 136.3 | 131.4 | 105.4 | 97.6 |
| HIGHWAY VEHICLES | 207.2 | 237.9 | 330.3 | 420.4 | 611.2 | 659.0 | 751.6 | 681.7 |
| OTHER | 310.1 | 266.0 | 226.5 | 309.7 | 337.5 | 238.1 | 270.3 | 274.0 |
| TOTAL | 785.3 | 863.5 | 901.4 | 1154.1 | 1395.4 | 1320.8 | 1423.1 | 1403.9 |

TABLE 11. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR COLORADO

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 1.6* | 2.6* | 3.6* | 4.8* | 5.3* | 5.5 | 4.6 | 3.0 | 4.4 | 5.5 |
| INDUSTRIAL | 14.9* | 20.8* | 24.3* | 28.3* | 26.9* | 25.0 | 19.1 | 14.8 | 15.8 | 19.0 |
| COMMERCIAL-RESIDENTIAL | 9.0* | 12.7* | 16.3* | 21.1* | 21.9* | 25.1* | 25.5* | 18.6* | 17.4* | 20.7* |
| PIPELINES | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| HIGHWAY VEHICLES | .0* | .0* | .0* | .0* | .1* | .2 | .4* | .4* | .5* | .5* |
| OTHER | 47.9 | 50.9 | 50.4 | 47.7 | 36.1 | 37.7 | 42.4 | 37.9 | 52.7 | 35.3 |
| TOTAL | 73.4 | 87.1 | 94.5 | 102.0 | 90.3 | 93.4 | 92.0 | 74.7 | 90.7 | 81.1 |

*- MAY NOT INCLUDE ALL EMISSIONS BECAUSE DATUM WAS NOT AVAILABLE



TABLE 12. SUMMARY OF NOX EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR COLORADO

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 1.6* | 2.7* | 3.7* | 5.0* | 5.5* | 5.5 | 4.7 | 3.2 | 4.6 | 7.0 |
| INDUSTRIAL | 14.8* | 20.0* | 24.2* | 28.1* | 26.7* | 24.1 | 24.8 | 18.4 | 20.9 | 25.0 |
| COMMERCIAL-RESIDENTIAL | 1.9* | 2.6* | 3.4* | 4.4* | 4.6* | 5.2* | 5.6* | 4.1* | 4.0* | 5.0* |
| PIPELINES | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| HIGHWAY VEHICLES | .0* | .0* | .1* | .5* | 1.9* | 4.1 | 6.4* | 6.5* | 8.8* | 8.2* |
| OTHER | 7.9 | 10.2 | 12.2 | 12.7 | 13.2 | 13.7 | 12.9 | 10.7 | 11.9 | 22.0 |
| TOTAL | 26.2 | 35.6 | 43.5 | 50.7 | 51.9 | 52.7 | 54.3 | 42.8 | 50.1 | 67.1 |

TABLE 13. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR COLORADO

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 4.1 | 5.5 | 21.7 | 38.4 | 37.1 | 56.1 | 80.5 | 93.3 |
| INDUSTRIAL | 13.3 | 15.3 | 26.0 | 20.1 | 19.8 | 24.7 | 26.2 | 32.2 |
| COMMERCIAL - RESIDENTIAL | 10.5 | 7.7 | 8.7 | 10.6 | 7.2 | 7.7 | 13.3 | 1.9 |
| PIPELINES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| HIGHWAY VEHICLES | 1.1 | 1.5 | 1.8 | 2.3 | 3.4 | 4.4 | 5.5 | 6.0 |
| OTHER | 32.5 | 24.4 | 23.4 | 55.2 | 19.7 | 17.8 | 16.6 | 17.0 |
| TOTAL | 61.5 | 54.3 | 81.6 | 126.6 | 87.3 | 110.6 | 142.2 | 150.4 |



TABLE 14. SUMMARY OF NOX EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR COLORADO

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 8.7 | 14.2 | 23.3 | 31.7 | 50.5 | 88.8 | 113.0 | 141.5 |
| INDUSTRIAL | 27.0 | 38.8 | 37.1 | 38.3 | 14.1 | 14.8 | 14.1 | 16.7 |
| COMMERCIAL - RESIDENTIAL | 4.4 | 4.6 | 6.4 | 8.1 | 9.6 | 10.9 | 11.0 | 9.3 |
| PIPELINES | 1.4 | 1.5 | 1.5 | 2.4 | 5.7 | 16.3 | 19.3 | 18.2 |
| HIGHWAY VEHICLES | 17.0 | 23.5 | 31.3 | 39.0 | 57.6 | 74.7 | 84.7 | 88.3 |
| OTHER | 23.1 | 22.4 | 24.1 | 31.5 | 28.2 | 24.8 | 28.0 | 35.8 |
| TOTAL | 81.7 | 105.0 | 123.7 | 151.0 | 165.7 | 230.3 | 270.2 | 309.9 |

TABLE 11. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR CONNECTICUT

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 4.8* | 7.9* | 10.8* | 14.5* | 16.9* | 25.3 | 23.4 | 18.2 | 31.5 | 41.6 |
| INDUSTRIAL | 37.2* | 49.5* | 59.6* | 68.6* | 69.5* | 78.5 | 64.3 | 50.9 | 52.7 | 56.9 |
| COMMERCIAL-RESIDENTIAL | 5.5* | 7.6* | 9.6* | 12.3* | 12.7* | 15.6* | 17.0* | 14.6* | 16.4* | 20.7* |
| PIPELINES | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| HIGHWAY VEHICLES | .0* | .0* | .0* | .0* | .1* | .3 | .5 | .6 | .9 | .7 |
| OTHER | 52.7 | 74.4 | 85.0 | 89.3 | 88.0 | 74.1 | 55.0 | 43.8 | 49.8 | 66.9 |
| TOTAL | 100.2 | 139.4 | 165.0 | 184.6 | 187.1 | 193.8 | 160.2 | 128.1 | 151.4 | 186.7 |

*- MAY NOT INCLUDE ALL EMISSIONS BECAUSE DATUM WAS NOT AVAILABLE



TABLE 12. SUMMARY OF NOX EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR CONNECTICUT

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 1.7* | 2.9* | 3.9* | 5.2* | 6.1* | 8.6 | 8.0 | 6.2 | 10.2 | 14.3 |
| INDUSTRIAL | 10.2* | 13.5* | 16.3* | 18.7* | 19.0* | 21.3 | 17.4 | 13.8 | 14.3 | 15.5 |
| COMMERCIAL-RESIDENTIAL | .4* | .6* | .7* | .9* | 1.0* | 1.5* | 1.9* | 2.1* | 2.6* | 2.9* |
| PIPELINES | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| HIGHWAY VEHICLES | .0* | .0* | .2* | 1.0* | 3.5* | 7.5 | 13.8 | 16.5 | 22.5 | 16.7 |
| OTHER | 20.4 | 26.0 | 28.6 | 29.7 | 30.3 | 27.6 | 20.6 | 16.0 | 18.3 | 25.9 |
| TOTAL | 32.7 | 43.0 | 49.8 | 55.6 | 59.9 | 66.5 | 61.7 | 54.5 | 68.0 | 75.3 |

TABLE 13. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR CONNECTICUT

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 60.9 | 82.8 | 134.0 | 198.8 | 193.0 | 32.0 | 25.9 | 29.4 |
| INDUSTRIAL | 45.8 | 45.9 | 52.5 | 58.7 | 46.7 | 9.6 | 17.6 | 13.0 |
| COMMERCIAL - RESIDENTIAL | 11.3 | 8.7 | 41.6 | 34.4 | 35.7 | 18.1 | 22.0 | 13.4 |
| PIPELINES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| HIGHWAY VEHICLES | 1.2 | 1.6 | 1.8 | 2.7 | 3.9 | 4.2 | 4.7 | 4.9 |
| OTHER | 45.0 | 20.0 | 10.1 | 9.4 | 8.3 | 3.6 | 2.7 | 1.7 |
| TOTAL | 164.2 | 159.1 | 240.0 | 304.0 | 287.7 | 67.5 | 72.9 | 62.4 |

TABLE 14. SUMMARY OF NOX EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR CONNECTICUT

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 18.6 | 28.6 | 34.5 | 50.4 | 46.7 | 28.4 | 24.5 | 24.5 |
| INDUSTRIAL | 11.8 | 13.5 | 17.3 | 20.0 | 14.8 | 8.7 | 14.4 | 11.9 |
| COMMERCIAL - RESIDENTIAL | 3.3 | 3.4 | 15.1 | 12.2 | 13.7 | 12.3 | 13.9 | 11.0 |
| PIPELINES | .0 | .1 | .3 | .1 | .1 | .1 | .0 | .1 |
| HIGHWAY VEHICLES | 25.5 | 33.5 | 39.5 | 53.2 | 87.2 | 94.3 | 90.9 | 87.3 |
| OTHER | 30.4 | 24.4 | 16.2 | 18.5 | 22.5 | 14.8 | 11.0 | 7.2 |
| TOTAL | 89.7 | 103.3 | 122.9 | 154.5 | 184.9 | 158.4 | 154.9 | 142.1 |

TABLE 11. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR DELAWARE

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .1* |
| INDUSTRIAL | .0* | .0* | .0* | .0* | .0* | 6.4* | 6.1* | 6.0* | 5.9* | 5.1* |
| COMMERCIAL-RESIDENTIAL | .0* | .0* | .0* | .0* | .0* | .1* | .1* | .1* | .1* | .3* |
| PIPELINES | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| HIGHWAY VEHICLES | .0* | .0* | .0* | .0* | .0* | .0* | .1* | .1* | .1* | .1* |
| OTHER | 4.7 | 5.6 | 6.1 | 6.3 | 6.4 | 6.0 | 6.2 | 5.6 | 6.8 | 9.0 |
| TOTAL | 4.7 | 5.6 | 6.1 | 6.3 | 6.5 | 12.5 | 12.5 | 11.9 | 13.0 | 14.6 |

*- MAY NOT INCLUDE ALL EMISSIONS BECAUSE DATUM WAS NOT AVAILABLE



TABLE 12. SUMMARY OF NOX EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR DELAWARE

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .1* | .0* |
| INDUSTRIAL | .0* | .0* | .0* | .0* | .0* | 1.5* | 1.5* | 1.5* | 1.4* | 1.3* |
| COMMERCIAL-RESIDENTIAL | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .1* | .1* |
| PIPELINES | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| HIGHWAY VEHICLES | .0* | .0* | .0* | .1* | .5* | 1.1* | 2.1* | 2.7* | 3.7* | 3.0* |
| OTHER | 2.7 | 3.2 | 3.3 | 3.4 | 3.5 | 3.3 | 3.8 | 2.8 | 3.5 | 4.8 |
| TOTAL | 2.7 | 3.2 | 3.3 | 3.5 | 4.0 | 5.9 | 7.4 | 7.0 | 8.8 | 9.2 |

TABLE 13. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR DELAWARE

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | .4 | 14.8 | 30.2 | 43.5 | 44.3 | 34.1 | 36.3 | 54.5 |
| INDUSTRIAL | 14.1 | 17.1 | 45.6 | 52.8 | 21.5 | 8.9 | 12.9 | 16.8 |
| COMMERCIAL - RESIDENTIAL | 2.7 | 2.1 | 7.0 | 5.7 | 5.5 | 6.2 | 5.8 | 22.9 |
| PIPELINES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| HIGHWAY VEHICLES | .2 | .3 | .4 | .6 | .7 | .8 | 1.1 | 1.3 |
| OTHER | 13.2 | 8.6 | 7.9 | 7.0 | 7.2 | 6.3 | 6.2 | 6.0 |
| TOTAL | 30.6 | 43.0 | 91.2 | 109.6 | 79.2 | 56.3 | 62.3 | 101.4 |

TABLE 14. SUMMARY OF NOX EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR DELAWARE

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | .2 | 5.7 | 9.3 | 13.5 | 21.3 | 19.6 | 20.0 | 22.3 |
| INDUSTRIAL | 4.0 | 5.0 | 14.1 | 17.5 | 6.8 | 3.6 | 4.9 | 5.4 |
| COMMERCIAL - RESIDENTIAL | 2.6 | .7 | 2.3 | 2.2 | 2.5 | 2.4 | 2.3 | 4.0 |
| PIPELINES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| HIGHWAY VEHICLES | 5.8 | 8.1 | 10.3 | 13.5 | 16.0 | 18.7 | 20.8 | 21.2 |
| OTHER | 6.7 | 4.8 | 4.8 | 4.9 | 6.7 | 4.5 | 4.0 | 7.1 |
| TOTAL | 19.2 | 24.4 | 40.8 | 51.5 | 53.3 | 48.9 | 52.1 | 60.1 |

TABLE 11. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR DISTRICT OF COLUMBIA

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 1.4* | 2.4* | 3.3* | 4.4* | 4.9* | 9.4 | 7.8 | 6.2* | 7.7* | 7.8* |
| INDUSTRIAL | 9.4* | 11.0* | 11.3* | 10.5* | 10.2* | 11.9 | 10.0 | 7.8* | 8.4* | 8.7* |
| COMMERCIAL-RESIDENTIAL | .4* | .5* | .5* | .6* | .5* | .8* | 1.2* | 1.4* | 1.6* | 2.5* |
| PIPELINES | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| HIGHWAY VEHICLES | .0* | .0* | .0* | .0* | .1* | .1 | .2 | .3 | .4 | .3 |
| OTHER | 8.1 | 9.8 | 10.3 | 9.7 | 9.8 | 9.2 | 10.5 | 8.5 | 10.2 | 12.8 |
| TOTAL | 19.4 | 23.7 | 25.4 | 25.2 | 25.4 | 31.3 | 29.7 | 24.2 | 28.3 | 32.0 |

*- MAY NOT INCLUDE ALL EMISSIONS BECAUSE DATUM WAS NOT AVAILABLE



TABLE 12. SUMMARY OF NOX EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR DISTRICT OF COLUMBIA

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | .5* | .8* | 1.0* | 1.4* | 1.5* | 2.1 | 1.8 | 1.4* | 1.9* | 2.3* |
| INDUSTRIAL | 3.5* | 4.1* | 4.2* | 3.9* | 3.8* | 4.4 | 3.7 | 2.9* | 3.1* | 3.2* |
| COMMERCIAL-RESIDENTIAL | .0* | .1* | .1* | .1* | .1* | .1* | .2* | .2* | .2* | .4* |
| PIPELINES | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| HIGHWAY VEHICLES | .0* | .0* | .1* | .4* | 1.3* | 2.9 | 5.2 | 7.2 | 10.2 | 6.7 |
| OTHER | 3.3 | 3.9 | 4.2 | 4.2 | 4.2 | 4.3 | 5.3 | 4.2 | 5.6 | 7.8 |
| TOTAL | 7.3 | 8.8 | 9.6 | 9.9 | 10.9 | 13.8 | 16.1 | 15.8 | 21.0 | 20.4 |

TABLE 13. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR DISTRICT OF COLUMBIA

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 29.6 | 26.5 | 15.9 | 10.5 | 74.5 | 9.8 | 4.7 | 1.9 |
| INDUSTRIAL | 3.3 | 3.9 | 12.4 | 5.0 | 9.3 | 4.9 | 1.5 | .5 |
| COMMERCIAL - RESIDENTIAL | 9.2 | 6.0 | 15.5 | 34.2 | 40.7 | 8.6 | 6.2 | 2.5 |
| PIPELINES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| HIGHWAY VEHICLES | .5* | .6* | .6* | .8* | .8* | .8 | .9 | .8 |
| OTHER | 8.2 | 5.3 | 2.7 | 2.4 | 2.1 | .8 | .6 | .4 |
| TOTAL | 50.8 | 42.2 | 46.9 | 52.9 | 127.3 | 24.8 | 14.0 | 6.1 |

*- MAY NOT INCLUDE ALL EMISSIONS BECAUSE DATUM WAS NOT AVAILABLE



TABLE 14. SUMMARY OF NOX EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR DISTRICT OF COLUMBIA

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 9.2 | 8.4 | 5.2 | 3.5 | 13.1 | 4.0 | 6.3 | 2.6 |
| INDUSTRIAL | 1.2 | 1.5 | 4.6 | 1.9 | 4.0 | 2.7 | 1.1 | .3 |
| COMMERCIAL - RESIDENTIAL | 1.5 | 1.4 | 3.9 | 6.1 | 7.8 | 3.8 | 3.5 | 2.6 |
| PIPELINES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| HIGHWAY VEHICLES | 9.2* | 9.2* | 9.6* | 12.1* | 15.7* | 16.1 | 16.7 | 14.5 |
| OTHER | 9.9 | 8.3 | 3.7 | 4.0 | 5.2 | 3.0 | 2.4 | 1.6 |
| TOTAL | 30.9 | 28.9 | 27.0 | 27.6 | 45.9 | 29.6 | 29.9 | 21.6 |

TABLE 11. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR FLORIDA

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | .5* | .8* | 1.1* | 1.5* | 1.6* | 26.5 | 22.8 | 21.6 | 34.2 | 60.7 |
| INDUSTRIAL | .9* | 1.7* | 2.7* | 4.0* | 4.5* | 12.1 | 11.5 | 11.2 | 15.1 | 28.1 |
| COMMERCIAL-RESIDENTIAL | .6* | 1.1* | 1.8* | 3.0* | 3.3* | 4.6* | 7.1* | 9.1* | 11.4* | 29.0* |
| PIPELINES | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| HIGHWAY VEHICLES | .0* | .0* | .0* | .1* | .2* | .5 | .5* | .6* | .9* | .8* |
| OTHER | 56.2 | 70.9 | 88.2 | 103.8 | 116.7 | 131.8 | 145.0 | 133.4 | 130.6 | 175.0 |
| TOTAL | 58.1 | 74.5 | 93.8 | 112.3 | 126.4 | 175.4 | 186.9 | 175.9 | 192.2 | 293.8 |

*- MAY NOT INCLUDE ALL EMISSIONS BECAUSE DATUM WAS NOT AVAILABLE



TABLE 12. SUMMARY OF NOX EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR FLORIDA

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | .1* | .2* | .2* | .3* | .3* | 5.2 | 4.5 | 4.3 | 6.9 | 12.8 |
| INDUSTRIAL | .3* | .5* | .9* | 1.3* | 1.4* | 3.2 | 3.1 | 3.4 | 4.6 | 9.9 |
| COMMERCIAL-RESIDENTIAL | .0* | .1* | .2* | .3* | .3* | .4* | .7* | .9* | 1.2* | 3.2* |
| PIPELINES | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| HIGHWAY VEHICLES | .0* | .0* | .3* | 1.7* | 5.8* | 12.5 | 13.5* | 15.5* | 23.3* | 21.5* |
| OTHER | 52.2 | 54.5 | 57.3 | 59.5 | 61.1 | 89.2 | 337.1 | 313.8 | 145.3 | 172.5 |
| TOTAL | 52.7 | 55.4 | 58.9 | 63.0 | 69.0 | 110.6 | 358.8 | 338.0 | 181.2 | 220.0 |

TABLE 13. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR FLORIDA

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 63.3 | 116.7 | 127.5 | 275.6 | 420.0 | 574.4 | 514.0 | 650.4 |
| INDUSTRIAL | 30.5 | 71.1 | 75.9 | 66.6 | 53.8 | 57.1 | 97.9 | 136.0 |
| COMMERCIAL - RESIDENTIAL | 12.9 | 21.5 | 12.9 | 7.2 | 14.8 | 10.0 | 18.1 | 13.8 |
| PIPELINES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| HIGHWAY VEHICLES | 2.2 | 3.4 | 4.0 | 5.7 | 9.7 | 15.0 | 17.8 | 21.2 |
| OTHER | 169.9 | 154.5 | 152.3 | 171.8 | 188.2 | 166.7 | 176.6 | 175.7 |
| TOTAL | 278.9 | 367.2 | 372.6 | 527.1 | 686.5 | 823.1 | 824.4 | 997.0 |

TABLE 14. SUMMARY OF NOX EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR FLORIDA

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 14.1 | 25.7 | 50.4 | 80.0 | 160.7 | 187.4 | 190.7 | 209.5 |
| INDUSTRIAL | 12.2 | 25.9 | 31.0 | 44.0 | 20.9 | 19.5 | 32.1 | 39.3 |
| COMMERCIAL - RESIDENTIAL | 3.2 | 4.6 | 4.8 | 4.8 | 6.6 | 6.0 | 7.7 | 6.0 |
| PIPELINES | .0 | .0 | 1.3 | 3.2 | 5.7 | 10.8 | 8.1 | 14.9 |
| HIGHWAY VEHICLES | 47.0 | 72.9 | 101.4 | 134.0 | 222.7 | 329.6 | 347.9 | 369.4 |
| OTHER | 139.5 | 121.8 | 74.1 | 75.5 | 90.1 | 62.4 | 68.9 | 63.2 |
| TOTAL | 215.9 | 250.9 | 263.0 | 341.3 | 506.8 | 615.7 | 655.5 | 702.3 |

TABLE 11. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR GEORGIA

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 3.0* | 5.0* | 6.8* | 9.0* | 9.1* | 11.0 | 9.0 | 8.2 | 13.1 | 20.6 |
| INDUSTRIAL | 16.7* | 23.0* | 28.9* | 34.6* | 39.4* | 50.1 | 40.9 | 29.1 | 28.4 | 28.3 |
| COMMERCIAL-RESIDENTIAL | 12.1* | 17.5* | 23.1* | 30.7* | 32.3* | 37.3* | 38.3* | 28.5* | 26.3* | 33.3* |
| PIPELINES | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| HIGHWAY VEHICLES | .0* | .0* | .0* | .0* | .1* | .3 | .5* | .6* | .9* | .9* |
| OTHER | 55.3 | 70.6 | 83.1 | 89.3 | 98.1 | 93.0 | 90.3 | 78.5 | 84.9 | 115.8 |
| TOTAL | 87.2 | 116.1 | 141.9 | 163.7 | 179.0 | 191.6 | 179.0 | 144.9 | 153.6 | 199.0 |

*- MAY NOT INCLUDE ALL EMISSIONS BECAUSE DATUM WAS NOT AVAILABLE



TABLE 12. SUMMARY OF NOX EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR GEORGIA

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | .6* | 1.0* | 1.4* | 1.9* | 1.9* | 2.0 | 1.7 | 2.3 | 3.7 | 7.5 |
| INDUSTRIAL | 5.4* | 7.5* | 9.4* | 11.3* | 12.8* | 15.9 | 13.1 | 11.6 | 12.3 | 18.5 |
| COMMERCIAL-RESIDENTIAL | 1.0* | 1.5* | 2.0* | 2.6* | 2.7* | 3.2* | 3.4* | 2.8* | 2.8* | 3.7* |
| PIPELINES | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| HIGHWAY VEHICLES | .0* | .0* | .2* | 1.1* | 3.8* | 8.2 | 13.1* | 15.7* | 23.1* | 22.7* |
| OTHER | 64.9 | 68.0 | 70.7 | 71.6 | 72.9 | 74.6 | 116.6 | 79.6 | 89.3 | 57.6 |
| TOTAL | 72.0 | 78.0 | 83.7 | 88.5 | 94.1 | 103.9 | 147.9 | 112.0 | 131.1 | 109.9 |

TABLE 13. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR GEORGIA

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 54.8 | 91.1 | 112.2 | 227.4 | 293.6 | 564.1 | 590.4 | 705.8 |
| INDUSTRIAL | 15.3 | 32.9 | 43.2 | 50.4 | 61.1 | 43.1 | 55.4 | 62.2 |
| COMMERCIAL - RESIDENTIAL | 22.1 | 18.5 | 10.5 | 8.3 | 14.7 | 14.9 | 13.3 | 1.8 |
| PIPELINES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| HIGHWAY VEHICLES | 1.8 | 2.6 | 3.1 | 5.2 | 9.1 | 11.6 | 13.9 | 14.6 |
| OTHER | 84.6 | 52.9 | 40.5 | 38.9 | 39.2 | 30.7 | 31.7 | 33.4 |
| TOTAL | 178.6 | 198.0 | 209.5 | 330.2 | 417.6 | 664.5 | 704.7 | 817.9 |

TABLE 14. SUMMARY OF NOX EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR GEORGIA

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 17.2 | 27.3 | 36.2 | 61.1 | 102.3 | 184.6 | 200.9 | 227.0 |
| INDUSTRIAL | 22.5 | 42.0 | 40.0 | 52.6 | 28.1 | 25.2 | 28.7 | 33.0 |
| COMMERCIAL - RESIDENTIAL | 8.3 | 8.3 | 9.0 | 8.5 | 10.1 | 10.2 | 11.3 | 12.3 |
| PIPELINES | .2 | .0 | 4.4 | 6.0 | 8.6 | 5.2 | 4.3 | 9.2 |
| HIGHWAY VEHICLES | 46.0 | 65.8 | 81.8 | 115.1 | 177.4 | 229.4 | 244.4 | 230.6 |
| OTHER | 103.4 | 63.3 | 49.3 | 54.2 | 63.1 | 46.0 | 48.1 | 48.3 |
| TOTAL | 197.5 | 206.7 | 220.7 | 297.4 | 389.6 | 500.7 | 537.7 | 560.4 |

TABLE 11. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR IDAHO

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | .0* | .0* | .0* | .0* | .0* | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | 1.8* | 2.6* | 3.4* | 4.2* | 4.0* | 3.7 | 3.0 | 2.7 | 3.2 | 4.7 |
| COMMERCIAL-RESIDENTIAL | 2.1* | 3.2* | 4.4* | 6.1* | 6.5* | 7.5* | 8.6* | 7.6* | 8.5* | 12.7* |
| PIPELINES | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| HIGHWAY VEHICLES | .0* | .0* | .0* | .0* | .0* | .1 | .1* | .2* | .2* | .2* |
| OTHER | 38.5 | 55.4 | 63.2 | 80.2 | 65.1 | 66.9 | 70.7 | 55.5 | 83.8 | 69.6 |
| TOTAL | 42.4 | 61.1 | 71.0 | 90.6 | 75.6 | 78.2 | 82.5 | 66.1 | 95.8 | 87.2 |

*- MAY NOT INCLUDE ALL EMISSIONS BECAUSE DATUM WAS NOT AVAILABLE



TABLE 12. SUMMARY OF NOX EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR IDAHO

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | .0* | .0* | .0* | .0* | .0* | .0 | .0 | .0 | .0 | .0 |
| INDUSTRIAL | 1.0* | 1.5* | 1.9* | 2.4* | 2.2* | 1.9 | 1.6 | 1.4 | 1.6 | 2.2 |
| COMMERCIAL-RESIDENTIAL | .3* | .5* | .6* | .9* | .9* | 1.1* | 1.3* | 1.1* | 1.3* | 1.9* |
| PIPELINES | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| HIGHWAY VEHICLES | .0* | .0* | .0* | .2* | .8* | 1.8 | 3.1* | 3.8* | 5.6* | 5.5* |
| OTHER | 5.4 | 7.1 | 8.7 | 9.5 | 10.1 | 12.0 | 10.6 | 9.3 | 9.4 | 14.3 |
| TOTAL | 6.7 | 9.0 | 11.3 | 13.0 | 14.1 | 16.9 | 16.6 | 15.5 | 17.9 | 23.8 |

TABLE 13. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR IDAHO

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .1 |
| INDUSTRIAL | 10.2 | 9.1 | 5.9 | 10.9 | 4.2 | 7.2 | 8.9 | 7.7 |
| COMMERCIAL - RESIDENTIAL | 9.7 | 10.6 | 9.2 | 7.6 | 5.4 | 7.0 | 6.5 | 4.7 |
| PIPELINES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| HIGHWAY VEHICLES | .7 | .8 | .8 | 1.1 | 1.3 | 1.7 | 2.4 | 2.1 |
| OTHER | 84.8 | 81.8 | 43.1 | 119.4 | 24.6 | 14.7 | 15.2 | 13.6 |
| TOTAL | 105.4 | 102.3 | 59.0 | 139.1 | 35.4 | 30.7 | 32.9 | 28.0 |

TABLE 14. SUMMARY OF NOX EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR IDAHO

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | 44.7 |
| INDUSTRIAL | 4.8 | 3.9 | 8.4 | 12.0 | 4.9 | 7.3 | 7.5 | 7.8 |
| COMMERCIAL - RESIDENTIAL | 2.2 | 2.0 | 3.2 | 3.2 | 3.3 | 3.9 | 3.1 | 2.4 |
| PIPELINES | .0 | .0 | .6 | 1.3 | 5.3 | 5.3 | 5.5 | 5.3 |
| HIGHWAY VEHICLES | 14.0 | 16.6 | 17.8 | 23.1 | 26.1 | 33.4 | 41.2 | 33.7 |
| OTHER | 10.6 | 11.6 | 12.5 | 12.7 | 16.1 | 17.9 | 18.7 | 17.0 |
| TOTAL | 31.6 | 34.1 | 42.6 | 52.3 | 55.7 | 67.7 | 76.1 | 110.8 |

TABLE 11. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR ILLINOIS

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 74.7* | 123.7* | 169.1* | 225.6* | 287.7* | 374.6 | 374.3 | 262.3 | 404.3 | 571.3 |
| INDUSTRIAL | 693.3* | 930.6* | 1132.7* | 1313.8* | 1252.1* | 1149.3 | 926.8 | 769.1 | 879.9 | 1041.9 |
| COMMERCIAL-RESIDENTIAL | 280.9* | 392.9* | 501.1* | 644.8* | 669.6* | 764.4* | 855.1* | 734.1* | 811.0* | 1195.3* |
| PIPELINES | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| HIGHWAY VEHICLES | .0* | .0* | .0* | .2* | .6* | 1.4 | 2.3 | 2.5 | 3.4 | 2.7 |
| OTHER | 410.0 | 564.5 | 684.7 | 764.5 | 753.6 | 677.8 | 581.5 | 463.2 | 524.7 | 732.4 |
| TOTAL | 1459.0 | 2011.6 | 2487.7 | 2948.9 | 2963.7 | 2967.4 | 2740.0 | 2231.3 | 2623.3 | 3543.7 |

*- MAY NOT INCLUDE ALL EMISSIONS BECAUSE DATUM WAS NOT AVAILABLE



TABLE 12. SUMMARY OF NOX EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR ILLINOIS

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 13.6* | 22.4* | 30.7* | 40.9* | 52.2* | 68.3 | 68.1 | 48.4 | 74.4 | 104.4 |
| INDUSTRIAL | 105.8* | 141.9* | 175.8* | 201.2* | 192.3* | 180.1 | 149.4 | 140.7 | 165.8 | 200.3 |
| COMMERCIAL-RESIDENTIAL | 12.9* | 18.0* | 23.0* | 29.6* | 30.7* | 35.1* | 39.3* | 34.6* | 39.0* | 57.3* |
| PIPELINES | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| HIGHWAY VEHICLES | .0* | .1* | .9* | 4.6* | 16.1* | 34.5 | 57.8 | 63.0 | 87.5 | 68.1 |
| OTHER | 73.6 | 91.6 | 102.6 | 106.8 | 110.8 | 110.8 | 91.1 | 76.4 | 75.2 | 113.5 |
| TOTAL | 205.9 | 274.0 | 333.0 | 383.1 | 402.1 | 428.8 | 405.8 | 363.0 | 441.8 | 543.6 |

TABLE 13. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR ILLINOIS

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 745.8 | 1096.2 | 1162.5 | 1514.9 | 1871.9 | 1779.2 | 1306.0 | 1191.0 |
| INDUSTRIAL | 770.0 | 731.9 | 606.0 | 641.7 | 419.5 | 238.8 | 217.5 | 233.6 |
| COMMERCIAL - RESIDENTIAL | 715.5 | 456.8 | 337.5 | 244.4 | 203.6 | 89.8 | 59.3 | 26.0 |
| PIPELINES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| HIGHWAY VEHICLES | 5.4 | 6.9 | 7.0 | 10.4 | 15.6 | 18.4 | 21.2 | 20.8 |
| OTHER | 428.9 | 244.3 | 172.3 | 161.4 | 148.4 | 111.9 | 113.4 | 107.7 |
| TOTAL | 2665.6 | 2536.1 | 2285.4 | 2572.8 | 2659.1 | 2238.2 | 1717.4 | 1579.2 |

TABLE 14. SUMMARY OF NOX EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR ILLINOIS

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 144.5 | 212.9 | 231.9 | 296.5 | 380.5 | 424.9 | 414.0 | 441.6 |
| INDUSTRIAL | 178.3 | 199.3 | 206.0 | 227.4 | 105.5 | 76.2 | 77.3 | 77.7 |
| COMMERCIAL - RESIDENTIAL | 40.6 | 32.6 | 67.4 | 63.4 | 64.3 | 54.4 | 56.6 | 42.7 |
| PIPELINES | 9.5 | 11.3 | 12.6 | 16.7 | 35.0 | 17.8 | 16.6 | 18.2 |
| HIGHWAY VEHICLES | 119.5 | 146.0 | 165.5 | 215.6 | 316.4 | 354.0 | 361.2 | 331.5 |
| OTHER | 130.9 | 113.1 | 134.9 | 140.6 | 148.6 | 121.9 | 102.6 | 105.7 |
| TOTAL | 623.4 | 715.2 | 818.4 | 960.2 | 1050.4 | 1049.2 | 1028.3 | 1017.5 |

TABLE 11. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR INDIANA

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 34.5* | 57.1* | 78.1* | 104.2* | 122.5* | 137.8 | 138.8 | 109.0 | 186.9 | 292.9 |
| INDUSTRIAL | 187.3* | 281.3* | 379.3* | 478.2* | 571.5* | 692.4 | 603.4 | 474.3 | 511.5 | 573.0 |
| COMMERCIAL-RESIDENTIAL | 55.6* | 85.0* | 118.3* | 165.4* | 177.5* | 202.6* | 223.7* | 188.2* | 204.3* | 295.8* |
| PIPELINES | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| HIGHWAY VEHICLES | .0* | .0* | .0* | .1* | .3* | .7 | 1.0 | 1.1 | 1.5 | 1.4 |
| OTHER | 173.5 | 252.9 | 325.2 | 379.4 | 414.2 | 367.6 | 309.2 | 248.5 | 280.8 | 415.1 |
| TOTAL | 450.8 | 676.3 | 900.8 | 1127.3 | 1286.0 | 1401.1 | 1276.2 | 1021.1 | 1185.0 | 1578.2 |

*- MAY NOT INCLUDE ALL EMISSIONS BECAUSE DATUM WAS NOT AVAILABLE



TABLE 12. SUMMARY OF NOX EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR INDIANA

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 6.7* | 11.1* | 15.1* | 20.2* | 23.8* | 27.2 | 27.3 | 22.9 | 38.6 | 58.3 |
| INDUSTRIAL | 31.1* | 46.2* | 62.8* | 78.8* | 94.5* | 117.8 | 103.5 | 86.7 | 96.2 | 113.3 |
| COMMERCIAL-RESIDENTIAL | 3.5* | 5.3* | 7.6* | 10.5* | 11.2* | 12.7* | 14.0* | 11.9* | 13.1* | 19.1* |
| PIPELINES | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| HIGHWAY VEHICLES | .0* | .1* | .4* | 2.3* | 7.9* | 17.1 | 26.5 | 29.2 | 39.6 | 36.2 |
| OTHER | 32.2 | 40.1 | 46.7 | 50.9 | 54.4 | 52.1 | 50.8 | 39.7 | 40.9 | 60.7 |
| TOTAL | 73.4 | 102.7 | 132.7 | 162.6 | 191.8 | 226.8 | 222.0 | 190.4 | 228.4 | 287.6 |

TABLE 13. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR INDIANA

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 372.9 | 582.4 | 894.2 | 1201.0 | 1533.8 | 1600.2 | 1325.7 | 1644.3 |
| INDUSTRIAL | 425.0 | 414.0 | 267.5 | 315.0 | 380.7 | 337.4 | 359.9 | 344.5 |
| COMMERCIAL - RESIDENTIAL | 194.4 | 124.1 | 116.4 | 69.4 | 56.2 | 72.9 | 50.7 | 28.0 |
| PIPELINES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| HIGHWAY VEHICLES | 3.0 | 4.0 | 4.3 | 6.1 | 9.3 | 11.9 | 13.4 | 19.1 |
| OTHER | 195.9 | 78.2 | 50.3 | 51.2 | 52.7 | 41.2 | 42.1 | 40.6 |
| TOTAL | 1191.3 | 1202.7 | 1332.6 | 1642.7 | 2032.6 | 2063.5 | 1791.8 | 2076.4 |



TABLE 14. SUMMARY OF NOX EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR INDIANA

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 73.4 | 115.0 | 157.6 | 212.0 | 269.9 | 336.2 | 327.2 | 393.2 |
| INDUSTRIAL | 83.1 | 91.4 | 87.9 | 118.4 | 91.0 | 65.9 | 82.3 | 81.0 |
| COMMERCIAL - RESIDENTIAL | 16.4 | 13.4 | 26.2 | 23.1 | 25.7 | 26.0 | 25.7 | 19.6 |
| PIPELINES | 4.2 | 5.0 | 6.3 | 10.0 | 13.9 | 12.0 | 6.1 | 11.1 |
| HIGHWAY VEHICLES | 74.4 | 98.2 | 111.4 | 140.6 | 189.9 | 224.3 | 232.3 | 299.2 |
| OTHER | 54.1 | 55.7 | 54.4 | 59.3 | 72.4 | 49.6 | 47.5 | 52.7 |
| TOTAL | 305.6 | 378.6 | 443.9 | 563.5 | 662.9 | 714.1 | 721.1 | 856.8 |

TABLE 11. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR IOWA

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 21.0* | 34.8* | 47.6* | 63.5* | 71.6* | 75.5 | 65.5 | 43.9 | 62.9 | 83.6 |
| INDUSTRIAL | 189.9* | 243.6* | 281.2* | 321.6* | 283.2* | 221.9* | 172.8* | 136.4 | 156.3 | 176.0 |
| COMMERCIAL-RESIDENTIAL | 102.8* | 137.8* | 167.6* | 204.7* | 207.9* | 237.4* | 248.1* | 190.0* | 187.2* | 245.0* |
| PIPELINES | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| HIGHWAY VEHICLES | .0* | .0* | .0* | .1* | .3* | .5 | .9* | .9* | 1.2* | 1.0* |
| OTHER | 143.9 | 186.0 | 209.9 | 211.9 | 219.2 | 181.3 | 152.5 | 120.1 | 124.4 | 163.7 |
| TOTAL | 457.6 | 602.1 | 706.3 | 801.8 | 782.3 | 716.6 | 639.8 | 491.4 | 531.9 | 669.3 |

*- MAY NOT INCLUDE ALL EMISSIONS BECAUSE DATUM HAS NOT AVAILABLE



TABLE 12. SUMMARY OF NOX EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR IOWA

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 3.3* | 5.4* | 7.4* | 9.9* | 11.2* | 12.0 | 10.4 | 7.9 | 11.4 | 15.1 |
| INDUSTRIAL | 26.8* | 34.3* | 39.7* | 44.7* | 39.2* | 30.7* | 23.4* | 22.8 | 26.9 | 32.1 |
| COMMERCIAL-RESIDENTIAL | 4.5* | 6.1* | 7.4* | 9.0* | 9.2* | 10.5* | 11.0* | 8.7* | 8.9* | 11.8* |
| PIPELINES | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| HIGHWAY VEHICLES | .0* | .1* | .4* | 1.8* | 6.5* | 13.9 | 22.1* | 23.9* | 30.2* | 26.5* |
| OTHER | 22.7 | 26.2 | 28.1 | 28.3 | 28.8 | 26.7 | 23.3 | 20.4 | 21.3 | 32.5 |
| TOTAL | 57.2 | 72.1 | 82.9 | 93.7 | 94.8 | 93.9 | 90.3 | 83.6 | 98.7 | 118.0 |

TABLE 13. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR IOWA

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 128.8 | 119.4 | 165.5 | 215.7 | 228.6 | 213.5 | 289.1 | 231.6 |
| INDUSTRIAL | 140.8 | 140.5 | 131.2 | 154.3 | 117.5 | 72.8 | 78.6 | 80.1 |
| COMMERCIAL - RESIDENTIAL | 149.9 | 95.4 | 53.9 | 31.2 | 12.4 | 7.2 | 8.7 | 5.9 |
| PIPELINES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| HIGHWAY VEHICLES | 1.9 | 2.3 | 2.5 | 3.1 | 5.8 | 6.5 | 7.6 | 7.6 |
| OTHER | 101.7 | 48.6 | 24.0 | 20.6 | 19.2 | 13.9 | 13.6 | 12.9 |
| TOTAL | 523.2 | 406.2 | 377.1 | 424.9 | 383.5 | 313.9 | 397.6 | 338.2 |



TABLE 14. SUMMARY OF NOX EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR IOWA

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 25.7 | 29.2 | 36.8 | 43.0 | 67.9 | 76.4 | 110.2 | 128.2 |
| INDUSTRIAL | 32.4 | 45.9 | 38.5 | 50.5 | 27.5 | 22.7 | 23.9 | 26.1 |
| COMMERCIAL - RESIDENTIAL | 9.1 | 8.1 | 13.6 | 12.0 | 11.9 | 11.2 | 9.7 | 8.8 |
| PIPELINES | 7.0 | 8.3 | 11.2 | 13.8 | 22.9 | 20.1 | 6.2 | 15.9 |
| HIGHWAY VEHICLES | 51.2 | 58.6 | 66.0 | 78.3 | 111.8 | 120.9 | 120.0 | 111.5 |
| OTHER | 42.4 | 42.5 | 31.2 | 31.8 | 39.4 | 32.2 | 27.4 | 21.9 |
| TOTAL | 167.8 | 192.6 | 197.2 | 229.3 | 281.3 | 283.4 | 297.4 | 312.3 |

TABLE 11. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR KANSAS

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 9.1* | 15.1* | 20.6* | 27.5* | 30.9* | 33.2 | 27.9 | 17.8 | 23.8 | 29.4 |
| INDUSTRIAL | 47.6* | 59.9* | 74.1* | 76.6* | 73.6* | 82.7 | 66.0 | 48.1 | 51.8 | 47.9 |
| COMMERCIAL-RESIDENTIAL | 41.3* | 54.4* | 64.9* | 77.3* | 77.7* | 88.9* | 88.1* | 60.9* | 52.0* | 56.6* |
| PIPELINES | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| HIGHWAY VEHICLES | .0* | .0* | .0* | .1* | .2* | .5 | .7* | .7* | .8* | .7* |
| OTHER | 162.9 | 255.6 | 286.1 | 265.6 | 225.6 | 200.8 | 165.5 | 124.7 | 129.0 | 170.9 |
| TOTAL | 260.9 | 385.0 | 445.6 | 447.0 | 407.9 | 406.1 | 348.3 | 252.2 | 257.4 | 305.5 |

*- MAY NOT INCLUDE ALL EMISSIONS BECAUSE DATUM WAS NOT AVAILABLE



TABLE 12. SUMMARY OF NOX EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR KANSAS

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 1 4* | 2.3* | 3.1* | 4.1* | 5.2* | 6.4 | 7.4 | 5.7 | 8.1 | 11.2 |
| INDUSTRIAL | 8.1* | 10.1* | 47.7* | 30.1* | 24.5* | 38.4 | 39.4 | 26.8 | 34.7 | 59.3 |
| COMMERCIAL-RESIDENTIAL | 3.0* | 4.0* | 5.9* | 6.7* | 6.3* | 7.0* | 7.4* | 5.3* | 5.3* | 6.3* |
| PIPELINES | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| HIGHWAY VEHICLES | .0* | .0* | .3* | 1.6* | 5.6* | 12.0 | 18.8* | 18.3* | 21.5* | 19.0* |
| OTHER | 20.2 | 24.4 | 26.8 | 26.6 | 27.1 | 67.3 | 62.8 | 52.4 | 51.7 | 90.0 |
| TOTAL | 32.7 | 40.8 | 83.9 | 69.1 | 68.8 | 131.1 | 135.8 | 108.5 | 121.3 | 185.7 |

TABLE 13. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR KANSAS

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 34.3 | 35.2 | 35.0 | 38.6 | 80.3 | 137.4 | 169.5 | 221.8 |
| INDUSTRIAL | 35.9 | 37.9 | 36.0 | 23.4 | 21.3 | 21.9 | 30.4 | 31.4 |
| COMMERCIAL - RESIDENTIAL | 13.6 | 9.4 | 10.2 | 4.2 | 2.1 | 3.9 | 3.5 | .7 |
| PIPELINES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| HIGHWAY VEHICLES | 1.5 | 1.9 | 1.9 | 2.6 | 4.2 | 4.8 | 5.5 | 6.7 |
| OTHER | 105.7 | 51.0 | 27.4 | 25.8 | 23.5 | 18.1 | 20.7 | 20.0 |
| TOTAL | 191.0 | 135.5 | 110.4 | 94.7 | 131.5 | 186.1 | 229.7 | 280.7 |



TABLE 14. SUMMARY OF NOX EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR KANSAS

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 15.5 | 20.4 | 25.5 | 31.1 | 54.8 | 75.9 | 120.2 | 168.6 |
| INDUSTRIAL | 71.5 | 73.1 | 52.3 | 59.6 | 15.8 | 14.8 | 17.7 | 19.4 |
| COMMERCIAL - RESIDENTIAL | 5.0 | 5.9 | 7.4 | 7.6 | 8.1 | 8.5 | 9.6 | 7.7 |
| PIPELINES | 11.7 | 43.2 | 53.5 | 62.1 | 117.8 | 120.6 | 117.1 | 96.1 |
| HIGHWAY VEHICLES | 38.2 | 46.6 | 51.2 | 65.1 | 81.2 | 92.9 | 94.9 | 99.4 |
| OTHER | 65.2 | 51.9 | 42.2 | 45.7 | 49.6 | 45.4 | 64.4 | 58.1 |
| TOTAL | 207.0 | 241.1 | 232.2 | 271.1 | 327.2 | 358.0 | 423.9 | 449.3 |

TABLE 11. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR KENTUCKY

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 9.3* | 15.5* | 21.1* | 28.2* | 32.6* | 35.5 | 40.4 | 37.6 | 73.1 | 126.2 |
| INDUSTRIAL | 65.7* | 85.3* | 99.8* | 111.3* | 123.3* | 148.1 | 131.6 | 108.1 | 122.5 | 140.9 |
| COMMERCIAL-RESIDENTIAL | 47.5* | 64.4* | 79.4* | 98.5* | 100.7* | 114.9* | 120.4* | 92.7* | 91.8* | 120.9* |
| PIPELINES | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| HIGHWAY VEHICLES | .0* | .0* | .0* | .0* | .1* | .2 | .4* | .5* | .7* | .6* |
| OTHER | 85.2 | 108.3 | 122.9 | 126.0 | 136.8 | 126.1 | 119.2 | 102.1 | 112.7 | 159.7 |
| TOTAL | 207.8 | 273.5 | 323.2 | 364.0 | 393.5 | 424.8 | 411.9 | 340.8 | 400.7 | 548.4 |

*- MAY NOT INCLUDE ALL EMISSIONS BECAUSE DATUM WAS NOT AVAILABLE



TABLE 12. SUMMARY OF NOX EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR KENTUCKY

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 1.9* | 3.1* | 4.3* | 5.7* | 6.6* | 7.2 | 8.1 | 7.6 | 14.8 | 25.5 |
| INDUSTRIAL | 12.3* | 15.9* | 20.0* | 22.4* | 26.4* | 31.9 | 27.6 | 22.4 | 26.1 | 30.8 |
| COMMERCIAL-RESIDENTIAL | 2.8* | 3.8* | 4.8* | 6.0* | 6.4* | 7.3* | 7.6* | 5.8* | 6.0* | 8.0* |
| PIPELINES | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| HIGHWAY VEHICLES | .0* | .0* | .2* | .8* | 2.8* | 5.9 | 9.9* | 11.9* | 17.5* | 16.6* |
| OTHER | 21.0 | 23.4 | 25.1 | 25.4 | 26.3 | 27.4 | 39.7 | 23.8 | 33.7 | 39.7 |
| TOTAL | 37.9 | 46.2 | 54.4 | 60.3 | 68.4 | 79.8 | 93.0 | 71.5 | 98.1 | 120.6 |

TABLE 13. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR KENTUCKY

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 91.0 | 314.4 | 422.2 | 690.5 | 1138.4 | 1276.8 | 1243.6 | 1052.3 |
| INDUSTRIAL | 129.6 | 121.6 | 81.7 | 106.7 | 153.8 | 58.6 | 71.8 | 77.1 |
| COMMERCIAL - RESIDENTIAL | 68.7 | 44.3 | 27.5 | 19.8 | 26.0 | 9.7 | 9.8 | 12.0 |
| PIPELINES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| HIGHWAY VEHICLES | 1.5 | 1.9 | 1.9 | 2.6 | 4.6 | 6.4 | 8.2 | 8.3 |
| OTHER | 105.9 | 57.2 | 38.8 | 36.2 | 34.8 | 29.6 | 32.8 | 34.5 |
| TOTAL | 396.7 | 539.5 | 572.1 | 855.8 | 1357.5 | 1381.2 | 1366.2 | 1184.3 |

TABLE 14. SUMMARY OF NOX EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR KENTUCKY

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 19.2 | 64.8 | 86.4 | 140.5 | 222.0 | 296.1 | 277.5 | 287.9 |
| INDUSTRIAL | 31.5 | 40.4 | 36.7 | 40.9 | 30.0 | 21.8 | 25.5 | 28.3 |
| COMMERCIAL - RESIDENTIAL | 8.0 | 7.3 | 9.6 | 9.0 | 12.4 | 9.4 | 11.1 | 11.4 |
| PIPELINES | 8.2 | 13.3 | 23.7 | 34.5 | 47.6 | 30.9 | 30.3 | 27.4 |
| HIGHWAY VEHICLES | 38.6 | 49.6 | 56.6 | 72.7 | 107.9 | 137.4 | 149.6 | 132.5 |
| OTHER | 42.5 | 40.1 | 41.0 | 42.0 | 38.4 | 38.5 | 57.8 | 78.7 |
| TOTAL | 148.0 | 215.4 | 254.1 | 339.6 | 458.3 | 534.1 | 551.8 | 566.2 |

TABLE 11. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR LOUISIANA

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 3.4* | 5.6* | 7.7* | 10.3* | 13.7* | 19.3 | 18.1 | 10.7 | 13.1 | 13.5 |
| INDUSTRIAL | 30.7* | 42.6* | 53.5* | 64.5* | 52.6* | 35.7 | 20.4 | 15.8 | 11.9 | 12.3 |
| COMMERCIAL-RESIDENTIAL | 9.4* | 13.6* | 18.0* | 24.0* | 25.3* | 30.4* | 30.7* | 22.8* | 22.2* | 45.9* |
| PIPELINES | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| HIGHWAY VEHICLES | .0* | .0* | .0* | .0* | .1* | .3 | .4* | .4* | .6* | .6* |
| OTHER | 97.0 | 125.1 | 148.9 | 163.0 | 174.3 | 191.7 | 186.0 | 159.0 | 159.7 | 192.1 |
| TOTAL | 140.5 | 186.9 | 228.0 | 261.8 | 266.0 | 277.3 | 255.7 | 208.7 | 207.6 | 264.4 |

*- MAY NOT INCLUDE ALL EMISSIONS BECAUSE DATUM WAS NOT AVAILABLE



TABLE 12. SUMMARY OF NOX EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR LOUISIANA

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | .5* | .9* | 1.2* | 1.6* | 2.9* | 5.3 | 7.8 | 6.4 | 8.8 | 12.9 |
| INDUSTRIAL | 4.7* | 6.5* | 8.1* | 22.8* | 32.8* | 90.6 | 96.6 | 51.9 | 70.4 | 126.0 |
| COMMERCIAL-RESIDENTIAL | .4* | .6* | .8* | 1.3* | 1.4* | 1.8* | 2.1* | 1.9* | 2.5* | 5.9* |
| PIPELINES | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| HIGHWAY VEHICLES | .0* | .0* | .2* | .9* | 3.1* | 6.8 | 10.7* | 10.8* | 15.4* | 16.3* |
| OTHER | 37.0 | 40.6 | 44.1 | 46.1 | 47.6 | 128.9 | 154.0 | 128.0 | 110.0 | 115.6 |
| TOTAL | 42.6 | 48.6 | 54.4 | 72.7 | 87.9 | 233.3 | 271.1 | 199.0 | 207.0 | 276.7 |

TABLE 13. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR LOUISIANA

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | .1 | .1 | .1 | .1 | .1 | 12.7 | 59.6 | 39.9 |
| INDUSTRIAL | 7.8 | 15.7 | 12.5 | 12.5 | 12.7 | 40.1 | 75.0 | 93.2 |
| COMMERCIAL - RESIDENTIAL | 5.9 | 4.4 | 1.6 | .6 | 7.7 | 18.9 | 21.0 | 107.3 |
| PIPELINES | .0 | .0 | .0 | .1 | .1 | .1 | .2 | .1 |
| HIGHWAY VEHICLES | 1.5 | 2.0 | 2.7 | 3.0 | 4.3 | 6.0 | 7.9 | 8.8 |
| OTHER | 164.8 | 140.0 | 132.2 | 140.8 | 154.3 | 151.2 | 164.6 | 165.9 |
| TOTAL | 180.2 | 162.2 | 149.2 | 157.0 | 179.2 | 229.0 | 328.4 | 415.3 |

TABLE 14. SUMMARY OF NOX EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR LOUISIANA

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 15.3 | 17.5 | 29.5 | 45.8 | 81.6 | 95.4 | 122.3 | 146.4 |
| INDUSTRIAL | 168.0 | 251.3 | 229.5 | 244.7 | 76.0 | 77.2 | 89.6 | 92.2 |
| COMMERCIAL - RESIDENTIAL | 4.1 | 4.9 | 5.4 | 5.0 | 10.1 | 12.0 | 11.6 | 15.9 |
| PIPELINES | 11.2 | 24.2 | 190.0 | 324.6 | 448.2 | 453.6 | 799.5 | 337.9 |
| HIGHWAY VEHICLES | 35.0 | 48.4 | 62.8 | 76.3 | 94.2 | 118.4 | 132.3 | 134.6 |
| OTHER | 100.1 | 101.7 | 109.5 | 118.0 | 150.0 | 156.7 | 193.3 | 153.5 |
| TOTAL | 333.7 | 448.1 | 626.6 | 814.4 | 860.1 | 913.5 | 1348.6 | 880.5 |

TABLE 11. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR MAINE

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 1.9* | 3.2* | 4.4* | 5.9* | 6.6* | 8.4 | 7.0 | 4.8 | 7.0 | 7.9 |
| INDUSTRIAL | 10.4* | 15.6* | 21.1* | 27.2* | 27.8* | 32.1 | 26.2 | 21.4 | 21.7 | 22.5 |
| COMMERCIAL-RESIDENTIAL | 1.6* | 2.5* | 3.6* | 5.1* | 5.5* | 6.7* | 7.6* | 6.9* | 8.0* | 10.3* |
| PIPELINES | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| HIGHWAY VEHICLES | .0* | .0* | .0* | .0* | .1* | .1 | .2 | .3 | .4 | .3 |
| OTHER | 41.2 | 55.7 | 64.8 | 71.5 | 75.9 | 63.1 | 44.6 | 37.3 | 43.7 | 58.6 |
| TOTAL | 55.2 | 77.0 | 93.9 | 109.6 | 115.9 | 110.4 | 85.7 | 70.6 | 80.7 | 99.5 |

*- MAY NOT INCLUDE ALL EMISSIONS BECAUSE DATUM WAS NOT AVAILABLE



TABLE 12. SUMMARY OF NOX EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR MAINE

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 1.0* | 1.6* | 2.2* | 2.9* | 3.3* | 3.7 | 3.1 | 2.0 | 2.9 | 3.3 |
| INDUSTRIAL | 3.8* | 5.7* | 7.7* | 10.0* | 10.2* | 11.0 | 8.9 | 7.1 | 7.3 | 7.7 |
| COMMERCIAL-RESIDENTIAL | .2* | .2* | .4* | .5* | .5* | .8* | .9* | 1.0* | 1.3* | 1.5* |
| PIPELINES | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| HIGHWAY VEHICLES | .0* | .0* | .1* | .5* | 1.6* | 3.5 | 6.3 | 7.1 | 9.2 | 7.7 |
| OTHER | 19.0 | 24.0 | 26.4 | 28.0 | 28.9 | 24.0 | 15.9 | 13.3 | 15.5 | 22.1 |
| TOTAL | 23.9 | 31.6 | 36.7 | 41.9 | 44.5 | 43.0 | 35.2 | 30.6 | 36.2 | 42.3 |

TABLE 13. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR MAINE

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 8.5 | 11.7 | 16.2 | 31.2 | 33.3 | 20.4 | 8.8 | 14.3 |
| INDUSTRIAL | 9.9 | 9.8 | 8.5 | 10.4 | 14.7 | 21.9 | 28.2 | 24.3 |
| COMMERCIAL - RESIDENTIAL | 3.4 | 4.0 | 11.6 | 9.8 | 20.9 | 16.5 | 20.1 | 9.5 |
| PIPELINES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| HIGHWAY VEHICLES | .6 | .7 | .7 | 1.0 | 1.5 | 1.8 | 2.2 | 2.2 |
| OTHER | 33.9 | 22.2 | 20.9 | 19.1 | 19.9 | 16.8 | 16.7 | 15.8 |
| TOTAL | 56.2 | 48.5 | 58.0 | 71.5 | 90.4 | 77.4 | 76.0 | 66.0 |

TABLE 14. SUMMARY OF NOX EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR MAINE

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 1.7 | 2.3 | 3.1 | 5.7 | 6.0 | 3.5 | 2.2 | 4.3 |
| INDUSTRIAL | 3.5 | 3.8 | 3.7 | 4.6 | 5.7 | 7.4 | 10.7 | 8.8 |
| COMMERCIAL - RESIDENTIAL | 2.4 | 2.3 | 4.6 | 4.7 | 6.8 | 6.0 | 7.4 | 5.2 |
| PIPELINES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .1 |
| HIGHWAY VEHICLES | 15.5 | 19.4 | 22.4 | 27.1 | 33.6 | 38.3 | 41.9 | 37.0 |
| OTHER | 15.6 | 13.8 | 12.3 | 10.9 | 13.0 | 9.3 | 7.2 | 6.9 |
| TOTAL | 38.8 | 41.6 | 46.1 | 53.0 | 65.2 | 64.5 | 69.4 | 62.3 |

TABLE 11. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR MARYLAND

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 3.3* | 5.4* | 7.4* | 9.8* | 12.4* | 19.0 | 19.7* | 16.1 | 27.5 | 43.0 |
| INDUSTRIAL | 42.7* | 55.7* | 65.6* | 73.8* | 67.9* | 78.4* | 66.9* | 61.4 | 71.9 | 89.4 |
| COMMERCIAL-RESIDENTIAL | 5.8* | 7.9* | 9.8* | 12.3* | 12.6* | 14.9* | 18.6* | 18.8* | 24.3* | 39.0* |
| PIPELINES | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| HIGHWAY VEHICLES | .0* | .0* | .0* | .0* | .1* | .2 | .4 | .5 | .7 | .6 |
| OTHER | 59.7 | 76.5 | 86.0 | 89.2 | 95.4 | 101.9 | 94.3 | 79.7 | 91.8 | 134.8 |
| TOTAL | 111.5 | 145.6 | 168.9 | 185.2 | 188.5 | 214.5 | 199.9 | 176.6 | 216.2 | 306.8 |

*- MAY NOT INCLUDE ALL EMISSIONS BECAUSE DATUM HAS NOT AVAILABLE



TABLE 12. SUMMARY OF NOX EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR MARYLAND

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 1.2* | 1.9* | 2.6* | 3.5* | 4.4* | 6.3 | 6.7* | 5.4 | 9.4 | 14.7 |
| INDUSTRIAL | 13.0* | 16.9* | 20.0* | 22.4* | 20.7* | 22.7* | 19.3* | 19.4 | 23.3 | 26.6 |
| COMMERCIAL-RESIDENTIAL | .5* | .7* | .9* | 1.1* | 1.1* | 1.4* | 1.8* | 2.0* | 2.7* | 4.5* |
| PIPELINES | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| HIGHWAY VEHICLES | .0* | .0* | .2* | .8* | 2.9* | 6.3 | 10.9 | 12.8 | 18.1 | 16.4 |
| OTHER | 21.1 | 25.5 | 27.6 | 28.4 | 29.3 | 50.6 | 52.4 | 41.4 | 49.2 | 77.6 |
| TOTAL | 35.8 | 45.1 | 51.3 | 56.2 | 58.5 | 87.3 | 91.0 | 81.0 | 102.7 | 139.8 |

TABLE 13. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR MARYLAND

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 59.5 | 64.6 | 127.7 | 249.1 | 327.1 | 205.6 | 213.3 | 245.6 |
| INDUSTRIAL | 82.1 | 94.5 | 77.1 | 81.3 | 63.8 | 38.8 | 51.3 | 56.0 |
| COMMERCIAL - RESIDENTIAL | 11.8 | 8.1 | 34.8 | 35.7 | 37.4 | 27.1 | 23.1 | 16.0 |
| PIPELINES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| HIGHWAY VEHICLES | 1.3 | 1.9 | 2.3 | 3.7 | 4.6 | 5.8 | 6.7 | 7.4 |
| OTHER | 84.1 | 55.4 | 42.0 | 44.4 | 44.5 | 33.2 | 34.6 | 34.0 |
| TOTAL | 238.8 | 224.5 | 283.8 | 414.1 | 477.4 | 310.3 | 329.0 | 359.0 |

TABLE 14. SUMMARY OF NOX EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR MARYLAND

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 20.6 | 23.1 | 36.3 | 70.0 | 88.6 | 68.5 | 77.7 | 89.6 |
| INDUSTRIAL | 17.8 | 21.4 | 26.3 | 30.8 | 18.6 | 13.1 | 16.8 | 18.7 |
| COMMERCIAL - RESIDENTIAL | 3.2 | 3.9 | 11.3 | 12.6 | 14.8 | 12.9 | 12.7 | 12.3 |
| PIPELINES | .0 | 1.1 | 1.1 | 1.5 | 2.5 | 2.7 | 2.3 | 4.9 |
| HIGHWAY VEHICLES | 31.5 | 43.8 | 55.6 | 77.9 | 108.1 | 132.0 | 134.6 | 131.3 |
| OTHER | 42.5 | 38.3 | 30.8 | 42.9 | 47.8 | 31.7 | 28.2 | 26.7 |
| TOTAL | 115.6 | 131.5 | 161.4 | 235.6 | 280.4 | 261.0 | 272.3 | 283.7 |

TABLE 11. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR MASSACHUSETTS

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 11.9* | 19.7* | 27.0* | 36.0* | 41.4* | 54.5 | 47.3 | 32.8 | 47.5 | 59.2 |
| INDUSTRIAL | 108.7* | 137.6* | 156.3* | 168.3* | 162.8* | 193.8 | 155.7 | 121.4 | 118.7 | 110.0 |
| COMMERCIAL-RESIDENTIAL | 14.7* | 19.4* | 23.2* | 27.8* | 28.0* | 35.9* | 42.4* | 41.2* | 49.1* | 65.2* |
| PIPELINES | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| HIGHWAY VEHICLES | .0* | .0* | .0* | .1* | .4* | .9 | 1.3 | 1.4 | 1.7 | 1.3 |
| OTHER | 90.8 | 115.6 | 128.0 | 128.6 | 132.3 | 125.7 | 106.6 | 87.1 | 91.6 | 128.8 |
| TOTAL | 226.0 | 292.3 | 334.6 | 360.8 | 364.9 | 410.8 | 353.3 | 284.0 | 308.6 | 364.5 |

*- MAY NOT INCLUDE ALL EMISSIONS BECAUSE DATUM WAS NOT AVAILABLE



TABLE 12. SUMMARY OF NOX EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR MASSACHUSETTS

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 4.8* | 8.0* | 10.9* | 14.5* | 16.7* | 20.2 | 17.7 | 12.0 | 17.1 | 21.7 |
| INDUSTRIAL | 34.6* | 43.8* | 49.8* | 53.6* | 51.9* | 59.4 | 47.4 | 36.4 | 35.6 | 33.5 |
| COMMERCIAL-RESIDENTIAL | 1.4* | 1.9* | 2.2* | 2.7* | 2.7* | 4.5* | 5.9* | 6.9* | 8.8* | 9.8* |
| PIPELINES | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| HIGHWAY VEHICLES | .0* | .1* | .6* | 3.1* | 10.8* | 23.2 | 32.6 | 36.1 | 44.1 | 32.9 |
| OTHER | 36.6 | 44.1 | 47.9 | 48.4 | 49.1 | 60.8 | 57.2 | 47.2 | 46.0 | 75.9 |
| TOTAL | 77.4 | 97.9 | 111.5 | 122.4 | 131.2 | 168.2 | 160.8 | 138.6 | 151.6 | 173.9 |

TABLE 13. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR MASSACHUSETTS

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 109.0 | 112.9 | 144.5 | 208.4 | 319.1 | 103.7 | 257.1 | 269.1 |
| INDUSTRIAL | 53.3 | 80.8 | 77.6 | 57.8 | 49.1 | 29.7 | 25.2 | 16.4 |
| COMMERCIAL - RESIDENTIAL | 22.0 | 18.7 | 122.9 | 182.3 | 181.8 | 129.4 | 105.8 | 46.1 |
| PIPELINES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| HIGHWAY VEHICLES | 2.5 | 3.1 | 3.3 | 4.4 | 6.0 | 6.6 | 8.2 | 8.8 |
| OTHER | 91.8 | 46.9 | 24.5 | 19.7 | 17.1 | 6.3 | 5.3 | 5.6 |
| TOTAL | 278.7 | 262.5 | 372.9 | 472.6 | 573.2 | 275.6 | 401.6 | 346.1 |



TABLE 14. SUMMARY OF NOX EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR MASSACHUSETTS

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 27.2 | 34.3 | 43.8 | 65.1 | 59.3 | 52.5 | 59.3 | 59.0 |
| INDUSTRIAL | 14.0 | 27.7 | 30.2 | 26.7 | 18.1 | 12.2 | 13.1 | 10.4 |
| COMMERCIAL - RESIDENTIAL | 7.4 | 7.7 | 35.7 | 43.8 | 45.3 | 39.6 | 38.3 | 24.4 |
| PIPELINES | .0 | 1.5 | .3 | .3 | 1.4 | .6 | .6 | .8 |
| HIGHWAY VEHICLES | 52.1 | 63.3 | 75.1 | 93.0 | 136.7 | 149.2 | 164.5 | 157.6 |
| OTHER | 66.9 | 51.8 | 34.9 | 37.3 | 37.6 | 21.4 | 15.0 | 15.1 |
| TOTAL | 167.7 | 186.3 | 220.0 | 266.3 | 298.5 | 275.5 | 290.8 | 267.4 |

TABLE 11. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR MICHIGAN

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 20.1* | 33.3* | 45.5* | 60.8* | 77.8* | 103.3* | 107.4 | 80.7 | 132.1 | 199.1 |
| INDUSTRIAL | 105.8* | 167.8* | 233.5* | 309.0* | 366.1* | 470.4 | 431.9 | 360.4 | 420.0 | 487.3 |
| COMMERCIAL-RESIDENTIAL | 27.7* | 45.0* | 65.7* | 95.8* | 104.3* | 119.2* | 138.1* | 124.9* | 144.7* | 221.7* |
| PIPELINES | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| HIGHWAY VEHICLES | .0* | .0* | .0* | .1* | .5* | 1.1 | 1.8 | 1.9 | 2.7 | 2.2 |
| OTHER | 227.1 | 358.9 | 387.8 | 421.2 | 341.4 | 311.2 | 288.6 | 204.4 | 230.9 | 253.9 |
| TOTAL | 380.7 | 604.9 | 732.6 | 886.9 | 890.0 | 1005.2 | 967.7 | 772.3 | 930.3 | 1164.3 |

*- MAY NOT INCLUDE ALL EMISSIONS BECAUSE DATUM HAS NOT AVAILABLE



TABLE 12. SUMMARY OF NOX EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR MICHIGAN

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 4.7* | 7.9* | 10.7* | 14.3* | 18.3* | 24.4* | 25.3 | 19.0 | 31.4 | 47.2 |
| INDUSTRIAL | 23.8* | 37.4* | 52.1* | 69.6* | 81.9* | 105.2 | 97.5 | 84.7 | 99.0 | 119.4 |
| COMMERCIAL-RESIDENTIAL | 2.5* | 4.0* | 5.9* | 8.6* | 9.4* | 10.7* | 12.5* | 11.9* | 14.4* | 22.1* |
| PIPELINES | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| HIGHWAY VEHICLES | .0* | .1* | .7* | 3.6* | 12.7* | 27.4 | 45.3 | 48.4 | 67.9 | 56.4 |
| OTHER | 42.5 | 48.4 | 53.4 | 56.5 | 58.8 | 60.7 | 49.4 | 35.1 | 32.1 | 52.1 |
| TOTAL | 73.5 | 97.8 | 122.9 | 152.6 | 181.1 | 228.4 | 230.0 | 199.2 | 244.8 | 297.3 |

TABLE 13. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR MICHIGAN

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 316.6 | 439.2 | 482.5 | 755.1 | 1197.1 | 1070.6 | 809.4 | 603.7 |
| INDUSTRIAL | 299.9 | 305.0 | 387.0 | 479.3 | 330.6 | 171.5 | 197.5 | 181.3 |
| COMMERCIAL - RESIDENTIAL | 175.8 | 116.0 | 123.3 | 87.8 | 51.8 | 33.9 | 37.4 | 18.4 |
| PIPELINES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| HIGHWAY VEHICLES | 4.3 | 5.6 | 5.7 | 7.9 | 11.6 | 13.5 | 17.1 | 15.2 |
| OTHER | 181.9 | 180.7 | 176.2 | 210.5 | 204.4 | 130.6 | 99.1 | 86.6 |
| TOTAL | 978.6 | 1046.5 | 1174.7 | 1540.6 | 1795.4 | 1420.1 | 1160.5 | 905.1 |

TABLE 14. SUMMARY OF NOX EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR MICHIGAN

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 76.8 | 104.5 | 120.5 | 186.8 | 282.3 | 283.2 | 278.6 | 282.8 |
| INDUSTRIAL | 80.8 | 86.8 | 141.4 | 187.7 | 105.8 | 69.4 | 66.2 | 73.1 |
| COMMERCIAL - RESIDENTIAL | 24.3 | 21.5 | 38.8 | 40.3 | 42.2 | 41.0 | 39.4 | 38.8 |
| PIPELINES | 1.1 | 2.3 | 3.3 | 5.7 | 17.3 | 23.3 | 18.3 | 23.6 |
| HIGHWAY VEHICLES | 101.9 | 130.9 | 145.8 | 188.9 | 276.6 | 304.7 | 330.2 | 276.9 |
| OTHER | 66.9 | 56.8 | 50.0 | 67.7 | 74.8 | 52.9 | 42.7 | 31.8 |
| TOTAL | 351.8 | 402.8 | 499.8 | 677.2 | 798.9 | 774.5 | 775.5 | 726.9 |

TABLE 11. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY SOURCE CATFGORY FOR MINNESOTA

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 7.3* | 12.1* | 16.6* | 22.1* | 23.2* | 20.6 | 16.7 | 12.3 | 19.6 | 29.4 |
| INDUSTRIAL | 30.2* | 42.3* | 53.8* | 65.6* | 77.9* | 98.1 | 87.4 | 70.6 | 77.9 | 88.4 |
| COMMERCIAL-RESIDENTIAL | 41.7* | 61.1* | 81.6* | 110.0* | 116.4* | 133.0* | 134.5* | 96.5* | 87.7* | 103.2* |
| PIPELINES | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| HIGHWAY VEHICLES | .0* | .0* | .0* | .1* | .3* | .6 | .8 | .9 | 1.2 | 1.0 |
| OTHER | 123.2 | 171.4 | 208.6 | 230.0 | 246.4 | 203.4 | 159.5 | 125.2 | 129.2 | 171.6 |
| TOTAL | 202.3 | 287.0 | 360.5 | 427.8 | 464.2 | 455.6 | 399.0 | 305.6 | 315.5 | 393.7 |

*- MAY NOT INCLUDE ALL EMISSIONS BECAUSE DATUM WAS NOT AVAILABLE



TABLE 12. SUMMARY OF NOX EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR MINNESOTA

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 1.4* | 2.4* | 3.3* | 4.4* | 4.6* | 4.1 | 3.3 | 2.8 | 4.5 | 7.5 |
| INDUSTRIAL | 4.7* | 6.6* | 8.3* | 10.2* | 12.1* | 15.4 | 13.8 | 14.5 | 17.0 | 23.9 |
| COMMERCIAL-RESIDENTIAL | 4.5* | 6.6* | 8.8* | 11.9* | 12.6* | 14.4* | 14.6* | 10.7* | 10.0* | 11.9* |
| PIPELINES | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| HIGHWAY VEHICLES | .0* | .1* | .4* | 1.9* | 6.6* | 14.2 | 21.3 | 23.2 | 30.7 | 25.2 |
| OTHER | 38.7 | 47.4 | 53.1 | 56.0 | 57.9 | 52.0 | 38.7 | 28.1 | 31.1 | 39.9 |
| TOTAL | 49.4 | 63.0 | 73.9 | 84.3 | 93.7 | 100.1 | 91.7 | 79.3 | 93.4 | 108.5 |

TABLE 13. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR MINNESOTA

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 54.4 | 66.0 | 103.2 | 165.0 | 271.5 | 201.7 | 142.1 | 122.6 |
| INDUSTRIAL | 35.5 | 35.0 | 90.2 | 66.1 | 59.3 | 53.1 | 31.9 | 27.2 |
| COMMERCIAL - RESIDENTIAL | 16.3 | 12.0 | 47.2 | 37.3 | 42.5 | 18.4 | 20.5 | 9.1 |
| PIPELINES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| HIGHWAY VEHICLES | 2.0 | 2.6 | 2.9 | 3.7 | 5.8 | 7.1 | 8.9 | 8.9 |
| OTHER | 109.1 | 54.9 | 31.7 | 29.9 | 27.8 | 20.6 | 19.8 | 19.4 |
| TOTAL | 217.2 | 170.4 | 275.1 | 302.0 | 406.9 | 300.9 | 223.2 | 187.1 |

TABLE 14. SUMMARY OF NOX EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR MINNESOTA

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 16.0 | 21.3 | 29.6 | 38.6 | 59.7 | 79.2 | 81.4 | 88.0 |
| INDUSTRIAL | 19.9 | 29.6 | 34.0 | 40.7 | 18.7 | 17.8 | 19.6 | 16.8 |
| COMMERCIAL - RESIDENTIAL | 6.1 | 6.7 | 14.7 | 15.6 | 19.2 | 18.2 | 18.9 | 13.9 |
| PIPELINES | .4 | .2 | .4 | 1.5 | 9.3 | 4.8 | 4.6 | 11.4 |
| HIGHWAY VEHICLES | 48.4 | 61.1 | 74.3 | 89.3 | 125.7 | 144.6 | 157.2 | 144.6 |
| OTHER | 43.9 | 40.0 | 49.0 | 48.5 | 47.8 | 39.8 | 31.8 | 33.9 |
| TOTAL | 134.6 | 158.9 | 202.0 | 234.2 | 280.4 | 304.4 | 313.5 | 308.6 |

TABLE 11. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR MISSISSIPPI

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 3.3* | 5.4* | 7.4* | 9.9* | 9.6* | 6.4 | 6.6 | 8.1 | 17.7 | 33.6 |
| INDUSTRIAL | 7.9* | 11.4* | 15.0* | 18.8* | 18.0* | 15.7 | 13.0 | 11.9 | 14.2 | 18.1 |
| COMMERCIAL-RESIDENTIAL | 4.0* | 6.1* | 8.4* | 11.6* | 12.4* | 14.9* | 16.4* | 14.2* | 13.2* | 19.1* |
| PIPELINES | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| HIGHWAY VEHICLES | .0* | .0* | .0* | .0* | .1* | .2 | .3* | .3* | .5* | .5* |
| OTHER | 65.8 | 86.3 | 105.0 | 117.7 | 131.8 | 123.7 | 118.7 | 107.6 | 117.8 | 161.7 |
| TOTAL | 81.0 | 109.3 | 135.8 | 158.1 | 171.9 | 160.9 | 155.1 | 142.1 | 163.3 | 233.0 |

*- MAY NOT INCLUDE ALL EMISSIONS BECAUSE DATUM HAS NOT AVAILABLE



TABLE 12. SUMMARY OF NOX EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR MISSISSIPPI

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | .9* | 1.5* | 2.1* | 2.7* | 2.7* | 1.8 | 1.9 | 2.4 | 5.2 | 10.1 |
| INDUSTRIAL | 2.4* | 3.5* | 4.6* | 5.8* | 5.5* | 4.8 | 4.5 | 7.1 | 9.4 | 17.5 |
| COMMERCIAL-RESIDENTIAL | .3* | .5* | .6* | .9* | .9* | 1.2* | 1.4* | 1.4* | 1.4* | 2.1* |
| PIPELINES | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| HIGHWAY VEHICLES | .0* | .0* | .1* | .6* | 2.2* | 4.7 | 7.8* | 7.7* | 12.4* | 13.2* |
| OTHER | 44.3 | 47.7 | 51.0 | 52.8 | 54.8 | 54.4 | 58.0 | 101.9 | 114.6 | 84.4 |
| TOTAL | 48.0 | 53.2 | 58.4 | 62.9 | 66.1 | 66.9 | 73.5 | 120.5 | 143.0 | 127.3 |

TABLE 13. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR MISSISSIPPI

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | .1* | .6 | 1.2 | .5 | 41.4 | 114.8 | 214.3 | 137.7 |
| INDUSTRIAL | .7 | 2.0 | 3.7 | 3.8 | 3.2 | 13.7 | 19.8 | 18.9 |
| COMMERCIAL - RESIDENTIAL | 1.6 | 2.0 | .5 | .4 | 1.0 | 4.6 | 5.9 | 22.1 |
| PIPELINES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| HIGHWAY VEHICLES | 1.2 | 1.5 | 1.5 | 2.0 | 3.7 | 4.4 | 5.7 | 6.2 |
| OTHER | 122.8 | 84.9 | 73.6 | 74.3 | 79.3 | 73.6 | 79.5 | 78.9 |
| TOTAL | 126.5 | 91.0 | 80.5 | 81.1 | 128.6 | 211.1 | 325.2 | 263.8 |

*- MAY NOT INCLUDE ALL EMISSIONS BECAUSE DATUM WAS NOT AVAILABLE



TABLE 14. SUMMARY OF NOX EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR MISSISSIPPI

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 4.0* | 8.3 | 8.6 | 13.5 | 30.2 | 38.9 | 55.0 | 69.8 |
| INDUSTRIAL | 20.8 | 34.7 | 31.2 | 40.1 | 12.2 | 11.6 | 11.9 | 11.1 |
| COMMERCIAL - RESIDENTIAL | 4.8 | 4.7 | 4.3 | 3.5 | 4.3 | 5.0 | 5.8 | 5.4 |
| PIPELINES | 11.8 | 21.2 | 39.2 | 56.6 | 84.0 | 57.8 | 46.3 | 54.6 |
| HIGHWAY VEHICLES | 29.7 | 37.4 | 43.1 | 54.3 | 71.3 | 85.8 | 96.5 | 93.0 |
| OTHER | 65.9 | 46.7 | 38.7 | 37.3 | 47.0 | 38.1 | 53.1 | 42.4 |
| TOTAL | 137.0 | 152.9 | 165.1 | 205.2 | 249.1 | 237.2 | 268.6 | 276.3 |

TABLE 11. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR MISSOURI

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 21.6* | 35.7* | 48.9* | 65.2* | 76.9* | 88.2 | 81.2 | 55.1 | 80.9 | 110.2 |
| INDUSTRIAL | 224.8* | 305.3* | 364.9* | 416.6* | 396.7* | 363.7 | 283.9 | 219.2 | 239.7 | 264.3 |
| COMMERCIAL-RESIDENTIAL | 109.9* | 152.0* | 191.6* | 243.3* | 251.3* | 287.5* | 304.0* | 238.1* | 238.3* | 319.5* |
| PIPELINES | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| HIGHWAY VEHICLES | .0* | .0* | .0* | .1* | .2* | .5 | 1.0* | 1.2* | 1.6* | 1.3* |
| OTHER | 92.7 | 148.2 | 178.8 | 194.3 | 189.7 | 185.4 | 165.6 | 122.3 | 144.7 | 174.3 |
| TOTAL | 449.0 | 641.2 | 784.1 | 919.5 | 914.8 | 925.2 | 835.7 | 636.0 | 705.2 | 869.6 |

*- MAY NOT INCLUDE ALL EMISSIONS BECAUSE DATUM WAS NOT AVAILABLE

TABLE 12. SUMMARY OF NOX EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR MISSOURI

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 3.3* | 5.4* | 7.4* | 9.9* | 11.7* | 13.6 | 12.7 | 10.3 | 15.2 | 21.0 |
| INDUSTRIAL | 32.8* | 44.3* | 52.9* | 63.2* | 57.9* | 53.4 | 51.0 | 40.8 | 47.0 | 58.6 |
| COMMERCIAL-RESIDENTIAL | 4.1* | 5.7* | 7.2* | 9.2* | 9.7* | 11.2* | 12.1* | 9.7* | 10.2* | 13.7* |
| PIPELINES | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| HIGHWAY VEHICLES | .0* | .1* | .3* | 1.7* | 6.0* | 12.9 | 26.7* | 30.9* | 40.9* | 34.2* |
| OTHER | 40.7 | 43.6 | 45.5 | 46.1 | 46.6 | 62.5 | 46.4 | 41.8 | 46.4 | 68.0 |
| TOTAL | 80.9 | 99.0 | 113.4 | 130.1 | 131.9 | 153.5 | 148.8 | 133.5 | 159.7 | 195.4 |

TABLE 13. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR MISSOURI

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 84.5 | 176.2 | 272.9 | 421.8 | 631.2 | 1072.1 | 1045.5 | 1100.0 |
| INDUSTRIAL | 145.9 | 145.2 | 130.9 | 123.6 | 130.5 | 122.0 | 121.8 | 104.5 |
| COMMERCIAL - RESIDENTIAL | 147.2 | 94.2 | 68.5 | 28.1 | 23.1 | 15.8 | 16.3 | 9.5 |
| PIPELINES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| HIGHWAY VEHICLES | 2.9 | 3.6 | 4.0 | 5.4 | 7.7 | 9.1 | 11.4 | 11.6 |
| OTHER | 126.1 | 96.8 | 80.0 | 260.7 | 196.9 | 75.8 | 74.0 | 57.9 |
| TOTAL | 506.6 | 516.0 | 556.3 | 839.6 | 989.3 | 1294.7 | 1269.0 | 1283.4 |

TABLE 14. SUMMARY OF NOX EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR MISSOURI

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 18.9 | 32.9 | 116.9 | 75.6 | 148.2 | 213.5 | 246.9 | 260.3 |
| INDUSTRIAL | 50.7 | 56.1 | 53.6 | 61.3 | 29.9 | 28.4 | 28.8 | 26.0 |
| COMMERCIAL - RESIDENTIAL | 12.8 | 12.0 | 19.4 | 14.9 | 17.6 | 17.3 | 19.0 | 15.2 |
| PIPELINES | 6.2 | 9.1 | 10.0 | 11.2 | 3.3 | 9.4 | 5.5 | 7.0 |
| HIGHWAY VEHICLES | 69.1 | 84.6 | 98.2 | 119.9 | 152.6 | 178.1 | 194.4 | 180.8 |
| OTHER | 71.0 | 75.1 | 75.6 | 85.5 | 71.8 | 55.9 | 61.2 | 51.5 |
| TOTAL | 228.7 | 269.8 | 373.6 | 368.4 | 423.3 | 502.6 | 555.8 | 540.8 |

TABLE 11. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR MONTANA

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | .5* | .8* | 1.1* | 1.4* | 1.4* | .9* | .5* | .3* | .4 | .4 |
| INDUSTRIAL | 6.8* | 9.4* | 11.9* | 14.4* | 14.6* | 15.9 | 12.5 | 9.3 | 9.3 | 9.1 |
| COMMERCIAL-RESIDENTIAL | 7.0* | 10.2* | 13.6* | 18.2* | 19.2* | 22.1* | 22.9* | 17.4* | 16.3* | 25.9* |
| PIPELINES | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| HIGHWAY VEHICLES | .0* | .0* | .0* | .0* | .0* | .1 | .1* | .2* | .3* | .2* |
| OTHER | 296.0 | 366.0 | 346.4 | 323.5 | 222.6 | 316.6 | 290.2 | 268.3 | 424.5 | 242.6 |
| TOTAL | 310.2 | 386.4 | 372.9 | 357.5 | 257.8 | 355.5 | 326.2 | 295.5 | 450.7 | 278.2 |

*- MAY NOT INCLUDE ALL EMISSIONS BECAUSE DATUM WAS NOT AVAILABLE



TABLE 12. SUMMARY OF NOX EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR MONTANA

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | .3* | .6* | .8* | 1.0* | 1.0* | .7* | .5* | .4* | .5 | .6 |
| INDUSTRIAL | 3.8* | 5.3* | 6.7* | 8.2* | 8.7* | 9.1 | 9.1 | 8.6 | 10.1 | 10.9 |
| COMMERCIAL-RESIDENTIAL | 1.0* | 1.5* | 2.0* | 2.6* | 2.8* | 3.3* | 3.5* | 2.8* | 2.9* | 4.3* |
| PIPELINES | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| HIGHWAY VEHICLES | .0* | .0* | .0* | .2* | .7* | 1.6 | 3.5* | 4.6* | 6.3* | 5.0* |
| OTHER | 15.8 | 18.5 | 20.7 | 21.8 | 22.8 | 34.4 | 26.1 | 24.1 | 30.5 | 62.9 |
| TOTAL | 21.0 | 25.9 | 30.3 | 33.8 | 36.0 | 49.1 | 42.7 | 40.4 | 50.2 | 83.8 |

TABLE 13. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR MONTANA

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | .1 | .0 | 3.3 | 5.2 | 9.1 | 15.0 | 22.1 | 30.8 |
| INDUSTRIAL | 4.6 | 6.2 | 10.4 | 5.8 | 9.7 | 11.8 | 15.8 | 26.5 |
| COMMERCIAL - RESIDENTIAL | 8.5 | 5.8 | 8.3 | 7.3 | 2.9 | 4.0 | 7.0 | 1.0 |
| PIPELINES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| HIGHWAY VEHICLES | .6 | .8 | .9 | 1.4 | 1.8 | 2.1 | 2.8 | 2.7 |
| OTHER | 286.2 | 357.5 | 297.6 | 320.1 | 395.8 | 148.7 | 120.6 | 101.8 |
| TOTAL | 300.1 | 370.4 | 320.5 | 339.9 | 419.3 | 181.6 | 168.4 | 162.7 |

*- MAY NOT INCLUDE ALL EMISSIONS BECAUSE DATUM WAS NOT AVAILABLE



TABLE 14. SUMMARY OF NOX EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR MONTANA

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | .2 | .2 | 2.2 | 3.9 | 8.2 | 14.2 | 38.8 | 41.0 |
| INDUSTRIAL | 7.8 | 9.2 | 10.2 | 12.4 | 4.7 | 6.3 | 7.8 | 8.9 |
| COMMERCIAL - RESIDENTIAL | 3.0 | 2.7 | 3.8 | 3.6 | 3.0 | 3.3 | 3.8 | 2.6 |
| PIPELINES | .8 | .6 | .6 | .5 | 7.2 | 5.1 | 5.4 | 7.8 |
| HIGHWAY VEHICLES | 13.5 | 16.9 | 20.1 | 26.6 | 31.1 | 36.5 | 43.5 | 38.7 |
| OTHER | 48.7 | 33.0 | 35.8 | 28.9 | 27.3 | 25.5 | 23.2 | 30.9 |
| TOTAL | 74.1 | 62.6 | 72.7 | 76.0 | 81.7 | 91.0 | 122.6 | 129.9 |

*- MAY NOT INCLUDE ALL EMISSIONS BECAUSE DATUM WAS NOT AVAILABLE

TABLE 11. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR NEBRASKA

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 10.9* | 18.1* | 24.7* | 33.0* | 37.3* | 41.7 | 34.8 | 21.9 | 28.1 | 32.8 |
| INDUSTRIAL | 47.5* | 59.9* | 67.6* | 72.2* | 62.5* | 48.9 | 33.4 | 24.2 | 23.6 | 23.5 |
| COMMERCIAL-RESIDENTIAL | 32.9* | 43.2* | 51.5* | 61.3* | 61.5* | 70.5* | 69.8* | 48.2* | 41.0* | 43.6* |
| PIPELINES | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| HIGHWAY VEHICLES | .0* | .0* | .0* | .0* | .1* | .3 | .5* | .5* | .5* | .5* |
| OTHER | 100.9 | 130.0 | 144.5 | 142.6 | 145.9 | 120.4 | 97.9 | 76.8 | 79.4 | 104.8 |
| TOTAL | 192.2 | 251.2 | 288.4 | 309.2 | 307.4 | 281.7 | 236.4 | 171.5 | 172.6 | 205.2 |

*- MAY NOT INCLUDE ALL EMISSIONS BECAUSE DATUM WAS NOT AVAILABLE



TABLE 12. SUMMARY OF NOX EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR NEBRASKA

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 1.6* | 2.7* | 3.7* | 4.9* | 5.6* | 6.3 | 5.3 | 4.3 | 5.7 | 5.4 |
| INDUSTRIAL | 8.0* | 10.1* | 11.4* | 12.2* | 10.6* | 8.3 | 6.2 | 6.6 | 7.4 | 11.1 |
| COMMERCIAL-RESIDENTIAL | 2.4* | 3.2* | 3.8* | 4.5* | 4.5* | 5.2* | 5.1* | 3.8* | 3.5* | 3.9* |
| PIPELINES | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| HIGHWAY VEHICLES | .0* | .0* | .2* | 1.0* | 3.6* | 7.7 | 12.6* | 12.2* | 13.1* | 11.8* |
| OTHER | 16.6 | 20.2 | 22.0 | 22.1 | 22.4 | 21.5 | 17.1 | 14.5 | 14.8 | 22.1 |
| TOTAL | 28.6 | 36.2 | 41.1 | 44.8 | 46.7 | 48.9 | 46.4 | 41.3 | 44.5 | 54.3 |

TABLE 13. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR NEBRASKA

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 12.5 | 10.5 | 21.6 | 40.3 | 36.0 | 28.2 | 48.5 | 49.8 |
| INDUSTRIAL | 14.0 | 14.0 | 14.8 | 23.1 | 23.8 | 10.0 | 12.7 | 7.6 |
| COMMERCIAL - RESIDENTIAL | 8.5 | 6.4 | 7.7 | 4.2 | 6.9 | 3.4 | 4.3 | .9 |
| PIPELINES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| HIGHWAY VEHICLES | 1.1 | 1.4 | 1.3 | 1.7 | 2.8 | 3.6 | 4.3 | 4.3 |
| OTHER | 63.9 | 30.1 | 16.7 | 14.2 | 14.9 | 11.0 | 13.4 | 9.8 |
| TOTAL | 100.0 | 62.5 | 62.2 | 83.4 | 84.3 | 56.2 | 83.1 | 72.4 |

*- MAY NOT INCLUDE ALL EMISSIONS BECAUSE DATUM HAS NOT AVAILABLE



TABLE 14. SUMMARY OF NOX EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR NEBRASKA

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 5.0 | 6.9 | 10.8 | 13.9 | 17.9 | 27.5 | 38.0 | 57.5 |
| INDUSTRIAL | 13.9 | 20.6 | 15.8 | 20.9 | 7.7 | 9.2 | 10.5 | 7.2 |
| COMMERCIAL - RESIDENTIAL | 2.6 | 3.5 | 4.7 | 4.9 | 6.8 | 6.2 | 6.2 | 5.1 |
| PIPELINES | 4.8 | 5.3 | 7.9 | 10.8 | 18.5 | 14.3 | 12.6 | 13.5 |
| HIGHWAY VEHICLES | 27.8 | 34.5 | 36.4 | 43.0 | 56.4 | 68.1 | 72.1 | 64.2 |
| OTHER | 23.2 | 23.9 | 27.5 | 31.3 | 39.3 | 32.9 | 45.8 | 24.1 |
| TOTAL | 77.2 | 94.5 | 103.1 | 124.7 | 146.5 | 158.2 | 185.2 | 171.6 |

TABLE 11. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR NEVADA

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | .0* | .0* | .0* | .0* | .0* | .1 | .1 | .1 | .1 | .1 |
| INDUSTRIAL | 1.2* | 1.8* | 2.5* | 3.4* | 4.0* | 5.1 | 4.2 | 3.0 | 2.6 | 4.3 |
| COMMERCIAL-RESIDENTIAL | .6* | .9* | 1.4* | 2.0* | 2.2* | 2.6* | 2.6* | 1.9* | 1.6* | 1.8* |
| PIPELINES | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| HIGHWAY VEHICLES | .0* | .0* | .0* | .0* | .0 | .0 | .0* | .1* | .1* | .1* |
| OTHER | 5.4 | 8.4 | 79.7 | 82.3 | 66.9 | 92.6 | 95.1 | 88.3 | 183.2 | 129.9 |
| TOTAL | 7.2 | 11.2 | 83.7 | 87.8 | 73.2 | 100.4 | 102.0 | 93.3 | 187.6 | 136.2 |

*- MAY NOT INCLUDE ALL EMISSIONS BECAUSE DATUM WAS NOT AVAILABLE



TABLE 12. SUMMARY OF NOX EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR NEVADA

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | .0* | .0* | .0* | .0* | .0* | .0 | .0 | .0 | .1 | .1 |
| INDUSTRIAL | .7* | 1.0* | 1.4* | 1.9* | 2.2* | 2.7 | 2.1 | 1.5 | 1.3 | 1.5 |
| COMMERCIAL-RESIDENTIAL | .1* | .1* | .2* | .3* | .3* | .4* | .4* | .3* | .2* | .3* |
| PIPELINES | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| HIGHWAY VEHICLES | .0* | .0* | .0* | .1* | .2* | .5 | 1.0* | 1.4* | 2.2* | 2.1* |
| OTHER | 1.6 | 2.5 | 3.4 | 4.0 | 4.5 | 38.7 | 36.1 | 29.5 | 25.6 | 51.9 |
| TOTAL | 2.3 | 3.6 | 5.0 | 6.3 | 7.3 | 42.3 | 39.7 | 32.7 | 29.4 | 55.8 |

TABLE 13. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR NEVADA

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | .0 | .0 | .0 | 4.6 | 7.5 | 34.0 | 37.1 | 45.3 |
| INDUSTRIAL | 2.2 | 1.6 | 1.4 | 2.0 | 2.2 | 3.0 | 3.7 | 4.2 |
| COMMERCIAL - RESIDENTIAL | .9 | .6 | 2.0 | 1.5 | 1.4 | .9 | .8 | .5 |
| PIPELINES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| HIGHWAY VEHICLES | .3 | .4 | .5 | .8 | 1.2 | 1.5 | 2.0 | 2.3 |
| OTHER | 153.8 | 220.9 | 211.3 | 197.3 | 295.0 | 220.2 | 192.7 | 167.9 |
| TOTAL | 157.3 | 223.4 | 215.1 | 206.0 | 307.2 | 259.6 | 236.3 | 220.2 |

TABLE 14. SUMMARY OF NOX EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR NEVADA

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | .0 | .7 | 1.6 | 5.4 | 12.7 | 59.1 | 51.8 | 61.6 |
| INDUSTRIAL | .8 | 4.9 | 1.7 | 3.3 | 1.6 | 2.1 | 2.5 | 2.6 |
| COMMERCIAL - RESIDENTIAL | .3 | .3 | .6 | .8 | 1.6 | 1.7 | 6.5 | 1.6 |
| PIPELINES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .2 |
| HIGHWAY VEHICLES | 5.5 | 7.9 | 10.7 | 16.3 | 20.8 | 26.4 | 32.2 | 33.5 |
| OTHER | 31.8 | 17.6 | 11.6 | 13.6 | 10.2 | 4.9 | 8.5 | 10.0 |
| TOTAL | 38.4 | 31.4 | 26.2 | 39.4 | 47.0 | 94.1 | 101.5 | 109.6 |

TABLE 11. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR NEW HAMPSHIRE

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 1.1* | 1.9* | 2.5* | 3.4* | 3.9* | 5.6 | 4.7 | 3.3 | 5.2 | 4.4 |
| INDUSTRIAL | 8.9* | 11.8* | 14.2* | 16.4* | 16.1* | 16.6* | 13.4* | 10.6* | 11.7 | 12.2 |
| COMMERCIAL-RESIDENTIAL | 1.4* | 1.9* | 2.4* | 3.0* | 3.2* | 3.9* | 4.4* | 4.1* | 4.6* | 6.3* |
| PIPELINES | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| HIGHWAY VEHICLES | .0* | .0* | .0* | .0* | .0* | .1 | .2 | .2 | .2 | .2 |
| OTHER | 33.2 | 44.2 | 49.0 | 51.4 | 53.0 | 42.2 | 25.1 | 20.2 | 25.3 | 31.8 |
| TOTAL | 44.6 | 59.7 | 68.2 | 74.2 | 76.2 | 68.4 | 47.7 | 38.4 | 47.1 | 54.8 |

*- MAY NOT INCLUDE ALL EMISSIONS BECAUSE DATUM HAS NOT AVAILABLE



TABLE 12. SUMMARY OF NOX EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR NEW HAMPSHIRE

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | .6* | .9* | 1.3* | 1.7* | 1.9* | 2.4 | 2.0 | 1.3 | 2.0 | 2.0 |
| INDUSTRIAL | 3.3* | 4.3* | 5.2* | 6.0* | 5.9* | 6.0* | 4.8* | 3.8* | 4.1 | 4.4 |
| COMMERCIAL-RESIDENTIAL | .1* | .2* | .2* | .3* | .3* | .5* | .6* | .6* | .7* | .9* |
| PIPELINES | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| HIGHWAY VEHICLES | .0* | .0* | .1* | .3* | 1.0* | 2.2 | 3.9 | 4.5 | 5.6 | 4.3 |
| OTHER | 15.5 | 20.0 | 21.6 | 22.5 | 23.0 | 18.3 | 10.2 | 8.3 | 10.4 | 12.7 |
| TOTAL | 19.4 | 25.5 | 28.4 | 30.8 | 32.1 | 29.3 | 21.4 | 18.5 | 22.9 | 24.2 |

TABLE 13. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR NEW HAMPSHIRE

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 7.2 | 11.5 | 15.8 | 25.3 | 67.5 | 63.0 | 51.1 | 72.9 |
| INDUSTRIAL | 3.3 | 5.2 | 5.6 | 7.1 | 15.5 | 6.8 | 5.3 | 5.3 |
| COMMERCIAL - RESIDENTIAL | 2.7 | 2.0 | 5.2 | 6.6 | 10.2 | 9.1 | 9.6 | 5.3 |
| PIPELINES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| HIGHWAY VEHICLES | .3 | .4 | .5 | .6 | .9 | 1.1 | 1.5 | 1.5 |
| OTHER | 15.7 | 7.2 | 4.7 | 3.6 | 2.9 | 1.6 | 1.4 | 1.5 |
| TOTAL | 29.2 | 26.3 | 31.7 | 43.1 | 97.1 | 81.6 | 68.8 | 86.6 |

TABLE 14. SUMMARY OF NOX EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR NEW HAMPSHIRE

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 1.5 | 2.0 | 3.0 | 5.8 | 15.0 | 15.1 | 12.9 | 18.0 |
| INDUSTRIAL | 1.2 | 2.0 | 2.3 | 2.8 | 5.0 | 2.5 | 2.6 | 2.5 |
| COMMERCIAL - RESIDENTIAL | 1.2 | 1.1 | 2.6 | 3.2 | 4.1 | 3.8 | 4.4 | 3.2 |
| PIPELINES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| HIGHWAY VEHICLES | 8.8 | 11.1 | 13.0 | 16.2 | 22.8 | 27.3 | 31.3 | 28.7 |
| OTHER | 8.7 | 6.4 | 4.5 | 4.3 | 5.1 | 2.5 | 1.8 | 2.3 |
| TOTAL | 21.5 | 22.5 | 25.4 | 32.2 | 52.1 | 51.2 | 53.0 | 54.8 |

TABLE 11. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR NEW JERSEY

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 12.0* | 19.8* | 27.1* | 36.1* | 46.1* | 81.5 | 76.5 | 56.0 | 80.2 | 96.9 |
| INDUSTRIAL | 43.7* | 66.6* | 91.2* | 119.1* | 131.5* | 206.7 | 180.0 | 153.2 | 159.2 | 161.3 |
| COMMERCIAL-RESIDENTIAL | .9* | 1.5* | 2.1* | 3.1* | 3.3* | 5.6* | 7.6* | 9.3* | 14.2* | 48.9* |
| PIPELINES | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| HIGHWAY VEHICLES | .0* | .0* | .0* | .1* | .3* | .7 | 1.4 | 1.5 | 2.1 | 1.5 |
| OTHER | 217.2 | 310.4 | 381.3 | 433.4 | 472.3 | 482.5 | 469.6 | 374.0 | 433.8 | 619.3 |
| TOTAL | 273.8 | 398.3 | 501.7 | 591.7 | 653.5 | 777.0 | 735.1 | 594.0 | 689.5 | 928.0 |

*- MAY NOT INCLUDE ALL EMISSIONS BECAUSE DATUM WAS NOT AVAILABLE



TABLE 12. SUMMARY OF NOX EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR NEW JERSEY

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 3.5* | 5.8* | 8.0* | 10.6* | 13.6* | 25.5 | 23.8 | 17.6 | 25.0 | 29.6 |
| INDUSTRIAL | 14.0* | 21.7* | 29.6* | 37.6* | 41.2* | 60.3 | 52.2 | 43.8 | 45.9 | 47.6 |
| COMMERCIAL-RESIDENTIAL | .1* | .1* | .2* | .3* | .3* | .8* | 1.2* | 1.7* | 2.5* | 8.1* |
| PIPELINES | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| HIGHWAY VEHICLES | .0* | .1* | .5* | 2.4* | 8.4* | 18.1 | 35.4 | 39.1 | 53.6 | 39.2 |
| OTHER | 75.7 | 102.9 | 118.9 | 129.3 | 135.8 | 240.3 | 266.0 | 206.8 | 224.6 | 367.4 |
| TOTAL | 93.2 | 130.7 | 157.1 | 180.2 | 199.3 | 345.1 | 378.6 | 309.0 | 351.6 | 492.0 |

TABLE 13. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR NEW JERSEY

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 132.6 | 150.1 | 207.2 | 362.9 | 295.1 | 118.0 | 102.5 | 107.3 |
| INDUSTRIAL | 159.8 | 172.0 | 137.2 | 130.7 | 102.1 | 59.4 | 51.0 | 61.7 |
| COMMERCIAL - RESIDENTIAL | 16.3 | 12.7 | 51.4 | 71.7 | 111.8 | 80.4 | 73.8 | 61.0 |
| PIPELINES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| HIGHWAY VEHICLES | 3.4 | 4.7 | 5.3 | 7.3 | 10.2 | 12.2 | 13.1 | 13.9 |
| OTHER | 289.6 | 166.3 | 110.4 | 112.0 | 102.4 | 77.3 | 84.3 | 85.3 |
| TOTAL | 601.7 | 505.8 | 511.5 | 684.7 | 621.6 | 347.3 | 324.7 | 329.2 |

TABLE 14. SUMMARY OF NOX EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR NEW JERSEY

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 42.9 | 49.1 | 61.4 | 99.5 | 108.0 | 62.8 | 58.8 | 69.0 |
| INDUSTRIAL | 43.5 | 56.1 | 50.1 | 55.6 | 34.3 | 21.1 | 23.5 | 30.4 |
| COMMERCIAL - RESIDENTIAL | 42.2 | 5.9 | 23.8 | 30.4 | 41.2 | 34.0 | 27.0 | 31.2 |
| PIPELINES | .0 | .2 | .7 | .6 | 1.2 | .5 | .6 | .6 |
| HIGHWAY VEHICLES | 70.3 | 95.8 | 113.3 | 143.4 | 218.4 | 258.4 | 251.6 | 235.8 |
| OTHER | 121.7 | 95.7 | 65.7 | 70.4 | 77.3 | 44.7 | 44.7 | 43.8 |
| TOTAL | 320.6 | 302.9 | 315.0 | 399.8 | 480.4 | 421.5 | 406.3 | 410.8 |

TABLE 11. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR NEW MEXICO

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | .2* | .3* | .5* | .6* | .6* | .8 | .6 | .5 | .5 | .7 |
| INDUSTRIAL | 1.1* | 1.8* | 2.6* | 3.6* | 4.7* | 6.8* | 5.8 | 4.2 | 3.9 | 3.6 |
| COMMERCIAL-RESIDENTIAL | .8* | 1.3* | 2.0* | 3.1* | 3.4* | 4.0* | 4.0* | 3.0* | 2.4* | 2.9* |
| PIPELINES | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| HIGHWAY VEHICLES | .0* | .0* | .0* | .0* | .0* | .0 | .1 | .1 | .2 | .2 |
| OTHER | 36.5 | 47.6 | 54.3 | 121.4 | 110.9 | 136.0 | 129.2 | 64.0 | 214.5 | 200.7 |
| TOTAL | 40.6 | 51.1 | 59.5 | 128.8 | 119.6 | 147.7 | 139.7 | 71.8 | 221.5 | 208.1 |

*- MAY NOT INCLUDE ALL EMISSIONS BECAUSE DATUM WAS NOT AVAILABLE



TABLE 12. SUMMARY OF NOX EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR NEW MEXICO

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | .1* | .2* | .3* | .4* | .4* | .5 | .4 | 1.0 | 1.4 | 2.1 |
| INDUSTRIAL | .7* | 1.1* | 1.6* | 2.2* | 2.8* | 3.7* | 5.0 | 13.2 | 17.4 | 28.1 |
| COMMERCIAL-RESIDENTIAL | .1* | .2* | .3* | .5* | .6* | .6* | .7* | .6* | .6* | .9* |
| PIPELINES | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| HIGHWAY VEHICLES | .0* | .0* | .0* | .1* | .4* | .8 | 2.1 | 2.5 | 4.0 | 4.2 |
| OTHER | 4.5 | 6.1 | 7.9 | 9.2 | 10.0 | 11.2 | 10.0 | 8.3 | 8.5 | 18.8 |
| TOTAL | 5.4 | 7.6 | 10.2 | 12.4 | 14.1 | 16.9 | 18.1 | 25.6 | 31.9 | 54.1 |

TABLE 13. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR NEW MEXICO

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | .8 | .2 | .9 | 54.6 | 91.8 | 85.3 | 99.5 | 112.5 |
| INDUSTRIAL | 2.9 | 2.4 | 4.9 | 2.0 | 2.1 | 5.8 | 8.6 | 7.2 |
| COMMERCIAL - RESIDENTIAL | 1.9 | 2.3 | 2.0 | 1.0 | .8 | 2.2 | 1.8 | 1.3 |
| PIPELINES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| HIGHWAY VEHICLES | .7 | 1.0 | 1.4 | 1.6 | 2.4 | 3.4 | 4.4 | 4.7 |
| OTHER | 211.2 | 212.7 | 191.2 | 261.1 | 425.8 | 386.7 | 173.1 | 158.0 |
| TOTAL | 217.6 | 218.6 | 200.4 | 320.3 | 523.0 | 483.5 | 287.6 | 283.7 |

TABLE 14. SUMMARY OF NOX EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR NEW MEXICO

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 3.8 | 5.5 | 8.7 | 35.0 | 82.8 | 104.0 | 116.9 | 140.6 |
| INDUSTRIAL | 51.5 | 67.3 | 50.4 | 45.9 | 6.0 | 6.0 | 5.8 | 4.8 |
| COMMERCIAL - RESIDENTIAL | 1.8 | 2.0 | 2.5 | 2.5 | 3.8 | 3.4 | 3.7 | 3.9 |
| PIPELINES | 3.0 | 10.7 | 21.2 | 31.1 | 97.9 | 84.5 | 76.1 | 94.0 |
| HIGHWAY VEHICLES | 11.2 | 16.3 | 23.6 | 27.5 | 37.7 | 52.5 | 61.1 | 59.5 |
| OTHER | 20.6 | 16.1 | 15.5 | 26.2 | 26.4 | 23.9 | 32.6 | 24.1 |
| TOTAL | 92.0 | 117.9 | 122.0 | 168.1 | 254.6 | 274.3 | 296.1 | 326.8 |

TABLE 11. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR NEW YORK

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 25.1* | 41.5* | 56.8* | 75.8* | 104.8* | 179.0 | 176.3 | 122.3 | 175.4 | 229.5 |
| INDUSTRIAL | 179.2* | 245.2* | 302.4* | 357.9* | 374.5* | 428.1 | 371.8 | 304.0 | 347.5 | 385.2 |
| COMMERCIAL-RESIDENTIAL | 20.0* | 28.4* | 36.8* | 48.0* | 50.2* | 59.8* | 66.0* | 56.6* | 60.7* | 87.0* |
| PIPELINES | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| HIGHWAY VEHICLES | .0* | .0* | .1* | .3* | .9* | 1.9 | 3.5 | 3.7 | 4.5 | 3.2 |
| OTHER | 470.2 | 634.2 | 725.5 | 769.3 | 806.2 | 707.9 | 627.3 | 496.4 | 591.9 | 704.3 |
| TOTAL | 694.5 | 949.4 | 1121.4 | 1251.1 | 1336.7 | 1376.7 | 1244.9 | 983.0 | 1180.1 | 1409.2 |

*- MAY NOT INCLUDE ALL EMISSIONS BECAUSE DATUM WAS NOT AVAILABLE



TABLE 12. SUMMARY OF NOX EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR NEW YORK

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 10.1* | 16.7* | 22.8* | 30.4* | 42.1* | 70.3 | 69.5 | 48.0 | 69.4 | 91.5 |
| INDUSTRIAL | 54.6* | 74.4* | 92.7* | 108.9* | 113.9* | 127.5 | 111.1 | 92.8 | 106.3 | 119.1 |
| COMMERCIAL-RESIDENTIAL | 1.6* | 2.2* | 3.5* | 3.8* | 4.8* | 6.2* | 7.1* | 6.8* | 8.3* | 10.7* |
| PIPELINES | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| HIGHWAY VEHICLES | .0* | .2* | 1.3* | 6.6* | 23.1* | 49.6 | 90.3 | 95.3 | 115.6 | 82.5 |
| OTHER | 184.6 | 241.6 | 268.0 | 280.3 | 287.0 | 301.8 | 285.5 | 226.9 | 251.1 | 287.4 |
| TOTAL | 250.9 | 335.0 | 388.2 | 429.9 | 470.8 | 555.3 | 563.6 | 469.8 | 550.7 | 591.3 |

TABLE 13. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR NEW YORK

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 349.8 | 351.8 | 564.7 | 677.7 | 657.7 | 583.2 | 495.6 | 466.4 |
| INDUSTRIAL | 333.9 | 320.3 | 256.5 | 313.9 | 327.3 | 150.4 | 172.9 | 223.6 |
| COMMERCIAL - RESIDENTIAL | 55.0 | 42.3 | 246.0 | 334.4 | 347.2 | 281.2 | 2d6.4 | 176.4 |
| PIPELINES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| HIGHWAY VEHICLES | 6.6 | 8.3 | 8.5 | 12.0 | 15.1 | 14.8 | 17.8 | 18.1 |
| OTHER | 486.0 | 251.3 | 156.5 | 117.9 | 101.7 | 50.3 | 48.8 | 48.9 |
| TOTAL | 1231.3 | 974.0 | 1232.2 | 1455.8 | 1449.0 | 1079.9 | 1021.5 | 933.5 |

TABLE 14. SUMMARY OF NOX EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR NEW YORK

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 132.9 | 144.7 | 166.9 | 201.2 | 233.4 | 186.8 | 180.2 | 172.8 |
| INDUSTRIAL | 92.8 | 106.0 | 98.8 | 121.6 | 88.7 | 43.3 | 52.1 | 63.5 |
| COMMERCIAL - RESIDENTIAL | 14.2 | 18.9 | 71.9 | 89.6 | 101.3 | 87.4 | 95.1 | 66.5 |
| PIPELINES | .1 | 1.2 | 3.6 | 4.1 | 4.6 | 4.0 | 4.4 | 4.6 |
| HIGHWAY VEHICLES | 144.1 | 179.8 | 205.2 | 259.0 | 356.1 | 337.9 | 357.9 | 338.2 |
| OTHER | 285.0 | 216.7 | 168.6 | 152.0 | 150.4 | 80.5 | 76.8 | 63.3 |
| TOTAL | 669.2 | 667.2 | 715.0 | 827.5 | 934.4 | 739.8 | 766.5 | 708.9 |

TABLE 11. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR NORTH CAROLINA

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 1.6* | 2.7* | 3.6* | 4.9* | 9.7* | 20.2 | 24.9 | 19.6 | 33.9 | 53.5 |
| INDUSTRIAL | 6.1* | 10.5* | 15.8* | 22.2* | 34.9* | 54.4 | 56.4 | 52.0 | 65.4 | 82.3 |
| COMMERCIAL-RESIDENTIAL | 6.1* | 10.9* | 17.2* | 26.5* | 29.4* | 33.7* | 41.2* | 40.1* | 49.2* | 78.4* |
| PIPELINES | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| HIGHWAY VEHICLES | .0* | .0* | .0* | .1* | .2* | .4 | .6* | .7* | 1.1* | 1.1* |
| OTHER | 37.9 | 51.4 | 66.3 | 78.7 | 89.8 | 87.1 | 85.2 | 73.6 | 76.7 | 109.6 |
| TOTAL | 51.7 | 75.5 | 103.0 | 132.3 | 163.9 | 195.7 | 208.4 | 186.0 | 226.3 | 324.8 |

*- MAY NOT INCLUDE ALL EMISSIONS BECAUSE DATUM WAS NOT AVAILABLE



TABLE 12. SUMMARY OF NOX EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR NORTH CAROLINA

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | .7* | 1.1* | 1.5* | 2.0* | 4.0* | 8.3 | 10.2 | 8.1 | 14.0 | 22.0 |
| INDUSTRIAL | 2.1* | 3.7* | 5.5* | 7.7* | 12.1* | 18.9 | 19.6 | 18.0 | 22.6 | 28.5 |
| COMMERCIAL-RESIDENTIAL | .5* | 1.0* | 1.5* | 2.3* | 2.6* | 3.0* | 3.7* | 3.7* | 4.6* | 7.2* |
| PIPELINES | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| HIGHWAY VEHICLES | .0* | .0* | .3* | 1.3* | 4.6* | 10.0 | 15.5* | 19.0* | 27.4* | 27.1* |
| OTHER | 29.2 | 31.9 | 34.8 | 36.7 | 38.4 | 39.8 | 38.8 | 29.3 | 33.8 | 49.3 |
| TOTAL | 32.5 | 37.6 | 43.6 | 50.0 | 61.7 | 80.1 | 87.8 | 78.0 | 102.3 | 134.1 |

TABLE 13. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR NORTH CAROLINA

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 91.5 | 133.8 | 128.4 | 224.5 | 419.3 | 437.6 | 419.9 | 430.1 |
| INDUSTRIAL | 68.1 | 68.5 | 64.9 | 74.1 | 77.4 | 60.5 | 99.8 | 91.8 |
| COMMERCIAL - RESIDENTIAL | 59.9 | 46.4 | 40.1 | 24.1 | 32.3 | 21.5 | 20.5 | 14.9 |
| PIPELINES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| HIGHWAY VEHICLES | 2.3 | 3.1 | 3.6 | 4.9 | 7.7 | 10.0 | 12.9 | 13.2 |
| OTHER | 86.0 | 57.8 | 55.8 | 45.7 | 45.7 | 35.5 | 36.0 | 33.3 |
| TOTAL | 307.8 | 309.5 | 292.8 | 373.4 | 582.4 | 565.1 | 589.1 | 583.2 |



TABLE 14. SUMMARY OF NOX EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR NORTH CAROLINA

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 37.6 | 54.6 | 64.4 | 111.1 | 227.7 | 228.6 | 231.0 | 265.3 |
| INDUSTRIAL | 25.1 | 27.3 | 36.3 | 44.8 | 34.5 | 27.8 | 36.0 | 36.1 |
| COMMERCIAL - RESIDENTIAL | 12.3 | 11.6 | 17.5 | 14.9 | 17.1 | 12.0 | 12.2 | 12.5 |
| PIPELINES | .0 | 2.5 | 3.0 | 5.3 | 7.7 | 4.4 | 3.2 | 7.3 |
| HIGHWAY VEHICLES | 61.3 | 81.1 | 97.1 | 125.7 | 167.8 | 206.8 | 230.2 | 212.8 |
| OTHER | 58.1 | 60.9 | 39.4 | 48.8 | 49.1 | 33.3 | 32.0 | 25.5 |
| TOTAL | 194.4 | 238.1 | 257.7 | 350.7 | 503.9 | 512.9 | 544.7 | 559.5 |

TABLE 11. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR NORTH DAKOTA

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 2.1* | 3.5* | 4.8* | 6.5* | 7.4* | 7.8 | 7.2* | 5.1* | 7.9* | 11.2* |
| INDUSTRIAL | .6* | 1.2* | 1.9* | 2.9* | 2.7* | 1.9* | 1.3* | 1.2* | 1.5* | 1.8* |
| COMMERCIAL-RESIDENTIAL | 1.0* | 2.1* | 3.6* | 5.9* | 6.6* | 7.6* | 7.9* | 6.1* | 5.9* | 7.6* |
| PIPELINES | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| HIGHWAY VEHICLES | .0* | .0* | .0* | .0* | .1* | .1 | .2* | .2* | .2* | .2* |
| OTHER | 11.7 | 17.7 | 23.7 | 28.4 | 31.2 | 27.0 | 21.0 | 18.0 | 18.2 | 23.5 |
| TOTAL | 15.4 | 24.5 | 34.0 | 43.6 | 48.0 | 44.5 | 37.6 | 30.5 | 33.7 | 44.4 |

*- MAY NOT INCLUDE ALL EMISSIONS BECAUSE DATUM WAS NOT AVAILABLE



TABLE 12. SUMMARY OF NOX EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR NORTH DAKOTA

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | .4* | .7* | .9* | 1.3* | 1.4* | 1.6 | 1.5* | 1.0* | 1.6* | 2.3* |
| INDUSTRIAL | .5* | 1.0* | 1.6* | 2.4* | 2.3* | 1.6* | 1.1* | 1.0* | 1.2* | 1.6* |
| COMMERCIAL-RESIDENTIAL | .5* | 1.0* | 1.7* | 2.8* | 3.1* | 3.6* | 3.7* | 2.8* | 2.8* | 3.6* |
| PIPELINES | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| HIGHWAY VEHICLES | .0* | .0* | .1* | .4* | 1.5* | 3.2 | 4.1* | 5.0* | 5.3* | 4.5* |
| OTHER | 5.7 | 9.2 | 12.9 | 15.7 | 17.4 | 14.8 | 11.2 | 9.1 | 10.0 | 18.4 |
| TOTAL | 7.1 | 11.9 | 17.2 | 22.6 | 25.7 | 24.8 | 21.6 | 19.0 | 20.9 | 30.3 |

TABLE 13. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR NORTH DAKOTA

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 35.9 | 32.3 | 16.8 | 15.9 | 32.8 | 46.9 | 71.0 | 93.3 |
| INDUSTRIAL | 2.4 | 3.6 | 9.6 | 8.9 | 7.5 | 6.4 | 8.9 | 8.0 |
| COMMERCIAL - RESIDENTIAL | 7.2 | 5.2 | 12.4 | 8.5 | 5.1 | 6.4 | 4.3 | 5.6 |
| PIPELINES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| HIGHWAY VEHICLES | .5 | .6 | .6 | .8 | 1.6 | 1.4 | 1.8 | 2.2 |
| OTHER | 18.7 | 14.4 | 14.0 | 13.5 | 13.2 | 11.8 | 12.6 | 12.3 |
| TOTAL | 64.7 | 56.3 | 53.4 | 47.6 | 60.2 | 72.9 | 98.7 | 121.3 |

TABLE 14. SUMMARY OF NOX EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR NORTH DAKOTA

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 7.2 | 6.4 | 7.2 | 6.7 | 20.3 | 35.6 | 62.3 | 85.9 |
| INDUSTRIAL | 3.2 | 4.9 | 5.6 | 6.6 | 3.2 | 3.1 | 4.1 | 3.7 |
| COMMERCIAL - RESIDENTIAL | 3.5 | 2.6 | 3.5 | 3.0 | 2.7 | 2.8 | 2.3 | 2.8 |
| PIPELINES | .0 | .0 | .0 | .0 | 17.6 | 15.1 | 15.4 | 1.5 |
| HIGHWAY VEHICLES | 11.0 | 13.8 | 14.9 | 19.3 | 26.8 | 27.5 | 30.7 | 31.8 |
| OTHER | 14.9 | 13.0 | 14.6 | 14.3 | 12.3 | 11.2 | 13.4 | 15.2 |
| TOTAL | 39.9 | 40.8 | 45.8 | 50.0 | 82.9 | 95.3 | 128.2 | 140.9 |

TABLE 11. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR OHIO

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 53.7* | 88.9* | 121.5* | 162.1* | 195.2* | 229.5 | 230.3 | 174.0 | 289.0 | 439.6 |
| INDUSTRIAL | 496.8* | 669.9* | 816.1* | 953.1* | 907.2* | 1068.1 | 925.1 | 767.4 | 881.6 | 1041.4 |
| COMMERCIAL-RESIDENTIAL | 104.2* | 146.6* | 188.1* | 243.5* | 253.5* | 289.8* | 331.3* | 294.0* | 333.4* | 502.7* |
| PIPELINES | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| HIGHWAY VEHICLES | .0* | .0* | .0* | .2* | .7* | 1.4 | 2.2 | 2.3 | 3.2 | 2.7 |
| OTHER | 327.1 | 443.7 | 528.4 | 564.4 | 609.2 | 522.9 | 460.8 | 369.6 | 400.3 | 579.4 |
| TOTAL | 981.8 | 1349.0 | 1654.1 | 1923.3 | 2045.7 | 2111.7 | 1949.7 | 1607.4 | 1907.4 | 2565.8 |

*- MAY NOT INCLUDE ALL EMISSIONS BECAUSE DATUM HAS NOT AVAILABLE



TABLE 12. SUMMARY OF NOX EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR OHIO

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 11.5* | 19.1* | 26.1* | 34.9* | 42.2* | 49.8 | 50.7 | 37.7 | 62.6 | 94.9 |
| INDUSTRIAL | 97.6* | 131.4* | 188.6* | 228.6* | 218.0* | 227.6 | 203.0 | 169.4 | 198.9 | 236.0 |
| COMMERCIAL-RESIDENTIAL | 6.4* | 8.9* | 14.5* | 18.7* | 20.3* | 21.9* | 24.8* | 20.2* | 24.5* | 36.2* |
| PIPELINES | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| HIGHWAY VEHICLES | .0* | .1* | .9* | 4.8* | 16.8* | 36.1 | 57.3 | 59.7 | 81.6 | 69.2 |
| OTHER | 57.7 | 71.6 | 81.8 | 85.5 | 90.0 | 85.8 | 80.9 | 67.0 | 67.2 | 101.7 |
| TOTAL | 173.2 | 231.2 | 312.0 | 372.5 | 387.2 | 421.2 | 416.7 | 353.9 | 434.7 | 538.0 |

TABLE 13. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR OHIO

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 658.8 | 869.6 | 1471.7 | 1701.3 | 2243.3 | 2661.9 | 2265.8 | 2346.2 |
| INDUSTRIAL | 824.1 | 800.4 | 760.9 | 860.8 | 821.3 | 432.5 | 449.4 | 345.9 |
| COMMERCIAL - RESIDENTIAL | 417.0 | 266.9 | 153.8 | 108.6 | 93.2 | 59.7 | 47.4 | 36.1 |
| PIPELINES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| HIGHWAY VEHICLES | 5.4 | 6.9 | 7.5 | 10.5 | 14.8 | 19.0 | 22.4 | 23.6 |
| OTHER | 305.0 | 127.2 | 84.0 | 83.3 | 81.8 | 60.5 | 61.5 | 61.9 |
| TOTAL | 2210.3 | 2071.0 | 2477.8 | 2764.5 | 3254.5 | 3233.7 | 2846.5 | 2813.7 |

TABLE 14. SUMMARY OF NOX EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR OHIO

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 143.0 | 188.6 | 249.0 | 287.5 | 434.7 | 541.9 | 573.6 | 586.7 |
| INDUSTRIAL | 195.6 | 204.6 | 231.5 | 282.2 | 186.9 | 118.5 | 113.0 | 90.3 |
| COMMERCIAL - RESIDENTIAL | 39.5 | 36.5 | 48.2 | 47.3 | 51.6 | 44.3 | 45.2 | 11.3 |
| PIPELINES | 4.0 | 5.8 | 11.4 | 13.8 | 18.9 | 14.9 | 15.5 | 16.7 |
| HIGHWAY VEHICLES | 127.5 | 161.5 | 184.9 | 233.2 | 314.0 | 372.5 | 391.1 | 373.2 |
| OTHER | 107.5 | 103.1 | 103.7 | 115.4 | 115.5 | 80.1 | 79.1 | 102.5 |
| TOTAL | 617.2 | 700.1 | 828.7 | 979.4 | 1121.6 | 1172.2 | 1217.5 | 1180.7 |

TABLE 11. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR OKLAHOMA

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 2.3* | 3.8* | 5.2* | 7.0* | 13.1* | 29.9 | 30.0 | 18.6 | 23.0 | 26.7 |
| INDUSTRIAL | 8.7* | 17.6* | 29.1* | 43.5* | 43.4* | 45.8 | 34.7 | 27.7 | 25.7 | 25.4 |
| COMMERCIAL-RESIDENTIAL | 8.0* | 16.7* | 28.7* | 46.9* | 53.0* | 60.6* | 59.6* | 40.4* | 33.8* | 35.3* |
| PIPELINES | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| HIGHWAY VEHICLES | .0* | .0* | .0* | .1* | .2* | .4 | .7* | .7* | .9* | .7* |
| OTHER | 47.9 | 88.9 | 171.5 | 250.6 | 268.5 | 289.5 | 218.6 | 173.2 | 206.5 | 242.2 |
| TOTAL | 67.0 | 127.0 | 234.5 | 348.1 | 378.1 | 426.1 | 343.6 | 260.7 | 289.9 | 330.4 |

*- MAY NOT INCLUDE ALL EMISSIONS BECAUSE DATUM WAS NOT AVAILABLE



TABLE 12. SUMMARY OF NOX EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR OKLAHOMA

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | .3* | .6* | .8* | 1.1* | 2.3* | 4.8 | 5.9 | 4.6 | 6.1 | 8.9 |
| INDUSTRIAL | 1.3* | 2.7* | 17.9* | 40.0* | 70.8* | 122.6 | 175.9 | 69.2 | 93.8 | 87.5 |
| COMMERCIAL-RESIDENTIAL | .4* | .8* | 1.6* | 2.7* | 3.4* | 3.6* | 4.2* | 2.8* | 3.3* | 4.2* |
| PIPELINES | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| HIGHWAY VEHICLES | .0* | .0* | .3* | 1.3* | 4.6* | 9.9 | 18.6* | 19.0* | 23.6* | 19.1* |
| OTHER | 10.9 | 16.0 | 22.0 | 25.7 | 27.9 | 86.6 | 121.8 | 77.2 | 124.9 | 100.8 |
| TOTAL | 12.9 | 20.1 | 42.6 | 70.7 | 109.0 | 227.5 | 326.4 | 172.8 | 251.7 | 220.6 |

TABLE 13. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR OKLAHOMA

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 8.1 | .5 | .2 | .2 | .2 | 2.6 | 10.5 | 59.4 |
| INDUSTRIAL | 10.6 | 39.7 | 29.0 | 26.8 | 9.7 | 10.7 | 29.4 | 30.3 |
| COMMERCIAL - RESIDENTIAL | 3.1 | 2.6 | 1.4 | 1.4 | 1.7 | 2.3 | 2.9 | 1.9 |
| PIPELINES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| HIGHWAY VEHICLES | 1.6 | 2.0 | 2.4 | 2.9 | 4.5 | 6.4 | 8.6 | 9.6 |
| OTHER | 209.4 | 179.7 | 122.7 | 85.1 | 70.4 | 52.7 | 53.5 | 46.0 |
| TOTAL | 232.8 | 224.4 | 155.6 | 116.4 | 86.5 | 74.7 | 105.0 | 147.3 |

TABLE 14. SUMMARY OF NOX EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR OKLAHOMA

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 9.8 | 16.0 | 20.4 | 31.1 | 57.6 | 74.8 | 102.9 | 172.9 |
| INDUSTRIAL | 87.5 | 96.6 | 62.4 | 85.9 | 10.7 | 13.7 | 21.9 | 21.4 |
| COMMERCIAL - RESIDENTIAL | 4.7 | 5.2 | 5.5 | 5.7 | 7.1 | 7.5 | 8.8 | 7.7 |
| PIPELINES | 8.9 | 8.2 | 11.2 | 15.7 | 151.5 | 129.3 | 126.4 | 103.3 |
| HIGHWAY VEHICLES | 37.7 | 48.0 | 57.8 | 70.9 | 99.9 | 129.9 | 148.6 | 148.0 |
| OTHER | 89.5 | 37.2 | 37.6 | 46.2 | 42.6 | 37.1 | 44.8 | 32.3 |
| TOTAL | 238.0 | 211.3 | 194.8 | 255.4 | 369.4 | 392.3 | 453.4 | 485.7 |

TABLE 11. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR OREGON

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | .0* | .0* | .0* | .0* | .0* | 13.1 | 10.4 | 9.2 | 7.0 | 12.2 |
| INDUSTRIAL | 1.3* | 2.2* | 3.3* | 4.5* | 4.0* | 14.1 | 13.3 | 13.6 | 14.4 | 17.7 |
| COMMERCIAL-RESIDENTIAL | 1.1* | 1.9* | 2.9* | 4.4* | 4.9* | 6.2* | 7.1* | 6.7* | 7.4* | 13.6* |
| PIPELINES | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| HIGHWAY VEHICLES | .0* | .0* | .0* | .0* | .1* | .2 | .4* | .4* | .6* | .6* |
| OTHER | 10.6 | 15.9 | 20.0 | 24.3 | 28.3 | 33.9 | 32.6 | 27.2 | 26.3 | 46.3 |
| TOTAL | 13.0 | 20.0 | 26.2 | 33.3 | 37.3 | 67.5 | 63.7 | 57.1 | 55.7 | 90.4 |

*- MAY NOT INCLUDE ALL EMISSIONS BECAUSE DATUM WAS NOT AVAILABLE



TABLE 12. SUMMARY OF NOX EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR OREGON

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | .0* | .0* | .0* | .0* | .0* | 5.1 | 4.1 | 3.6 | 1.5 | 2.9 |
| INDUSTRIAL | .8* | 1.4* | 2.0* | 2.8* | 2.4* | 3.6 | 3.3 | 3.5 | 4.2 | 5.6 |
| COMMERCIAL-RESIDENTIAL | .2* | .3* | .4* | .6* | .7* | .9* | 1.0* | .9* | 1.1* | 1.7* |
| PIPELINES | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| HIGHWAY VEHICLES | .0* | .0* | .2* | .8* | 2.9* | 6.2 | 9.7* | 10.1* | 14.5* | 14.5* |
| OTHER | 19.4 | 21.0 | 22.9 | 23.8 | 24.5 | 79.8 | 75.8 | 66.8 | 60.0 | 129.9 |
| TOTAL | 20.3 | 22.6 | 25.5 | 28.0 | 30.5 | 95.5 | 93.9 | 85.0 | 81.4 | 154.7 |

TABLE 13. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR OREGON

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 16.5 | 16.9 | .1 | .0 | .5 | 1.2 | .6 | 12.2 |
| INDUSTRIAL | 20.6 | 23.8 | 15.4 | 12.9 | 15.9 | 14.4 | 18.1 | 20.1 |
| COMMERCIAL - RESIDENTIAL | 8.3 | 7.8 | 23.7 | 21.2 | 24.7 | 16.5 | 9.7 | 7.9 |
| PIPELINES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| HIGHWAY VEHICLES | 1.6 | 1.7 | 1.9 | 2.7 | 4.1 | 5.0 | 7.1 | 7.2 |
| OTHER | 28.6 | 19.4 | 14.5 | 15.5 | 16.0 | 11.4 | 14.4 | 13.3 |
| TOTAL | 75.6 | 69.6 | 55.6 | 52.5 | 61.2 | 48.5 | 49.8 | 60.8 |

TABLE 14. SUMMARY OF NOX EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR OREGON

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 3.8 | 3.7 | .2 | .0 | .4 | .6 | .6 | 13.3 |
| INDUSTRIAL | 7.1 | 8.1 | 14.6 | 20.9 | 11.8 | 12.1 | 14.9 | 13.4 |
| COMMERCIAL - RESIDENTIAL | 3.7 | 3.2 | 6.1 | 6.7 | 7.0 | 6.2 | 5.1 | 5.2 |
| PIPELINES | .0 | .0 | .1 | .9 | 6.9 | 9.9 | 10.9 | 7.0 |
| HIGHWAY VEHICLES | 34.5 | 38.5 | 44.3 | 59.6 | 80.6 | 96.2 | 116.6 | 108.2 |
| OTHER | 66.2 | 50.1 | 48.4 | 45.9 | 47.9 | 37.5 | 47.4 | 55.0 |
| TOTAL | 115.3 | 103.6 | 113.7 | 134.0 | 154.6 | 162.5 | 195.5 | 202.0 |

TABLE 11. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR PENNSYLVANIA

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 23.6* | 39.1* | 53.5* | 71.4* | 111.2* | 193.0 | 204.6 | 140.1 | 209.6 | 289.7 |
| INDUSTRIAL | 314.9* | 502.6* | 716.3* | 935.1* | 1054.1* | 1267.6 | 1054.2 | 768.3 | 794.0 | 821.9 |
| COMMERCIAL-RESIDENTIAL | 23.7* | 38.5* | 56.3* | 82.1* | 89.4* | 103.2* | 115.8* | 100.5* | 112.8* | 181.2* |
| PIPELINES | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| HIGHWAY VEHICLES | .0* | .0* | .0* | .1* | .4* | 1.0 | 2.2 | 2.7 | 3.7 | 2.8 |
| OTHER | 382.5 | 523.0 | 605.6 | 664.3 | 725.3 | 647.7 | 465.4 | 398.5 | 505.9 | 622.4 |
| TOTAL | 744.7 | 1103.2 | 1431.7 | 1753.0 | 1980.5 | 2212.4 | 1842.2 | 1410.1 | 1626.0 | 1918.0 |

*- MAY NOT INCLUDE ALL EMISSIONS BECAUSE DATUM WAS NOT AVAILABLE



TABLE 12. SUMMARY OF NOX EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR PENNSYLVANIA

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 8.0* | 13.2* | 18.0* | 24.1* | 37.5* | 64.8 | 68.8 | 47.1 | 70.3 | 97.0 |
| INDUSTRIAL | 88.5* | 138.9* | 271.0* | 331.9* | 348.1* | 380.3 | 317.3 | 235.1 | 249.7 | 264.9 |
| COMMERCIAL-RESIDENTIAL | 1.5* | 2.5* | 5.8* | 7.9* | 9.1* | 9.6* | 10.3* | 8.2* | 10.3* | 16.7* |
| PIPELINES | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| HIGHWAY VEHICLES | .0* | .1* | .6* | 3.3* | 11.5* | 24.7 | 55.4 | 69.7 | 93.5 | 72.1 |
| OTHER | 178.4 | 233.5 | 257.9 | 272.7 | 278.9 | 255.8 | 175.8 | 140.2 | 159.0 | 213.1 |
| TOTAL | 276.4 | 388.1 | 553.3 | 639.8 | 685.1 | 735.2 | 627.6 | 500.2 | 582.9 | 663.7 |

TABLE 13. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR PENNSYLVANIA

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 460.9 | 538.7 | 677.2 | 919.9 | 1531.5 | 1440.3 | 1144.6 | 1415.7 |
| INDUSTRIAL | 641.7 | 674.2 | 585.8 | 448.3 | 539.6 | 353.3 | 383.1 | 345.9 |
| COMMERCIAL - RESIDENTIAL | 133.2 | 86.3 | 109.7 | 107.1 | 130.0 | 90.8 | 81.1 | 91.1 |
| PIPELINES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| HIGHWAY VEHICLES | 5.5 | 7.0 | 8.2 | 10.4 | 14.9 | 19.7 | 22.8 | 23.5 |
| OTHER | 514.2 | 445.0 | 348.9 | 275.8 | 236.7 | 157.5 | 165.8 | 134.6 |
| TOTAL | 1755.4 | 1751.2 | 1729.9 | 1761.4 | 2452.7 | 2061.6 | 1797.3 | 2010.9 |

TABLE 14. SUMMARY OF NOX EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR PENNSYLVANIA

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 155.2 | 181.7 | 183.2 | 246.9 | 362.7 | 431.5 | 400.6 | 501.0 |
| INDUSTRIAL | 184.6 | 196.3 | 213.1 | 187.6 | 129.5 | 92.6 | 96.7 | 93.0 |
| COMMERCIAL - RESIDENTIAL | 20.4 | 20.1 | 42.8 | 44.7 | 52.6 | 45.2 | 47.1 | 47.8 |
| PIPELINES | 4.2 | 11.2 | 18.9 | 24.2 | 36.1 | 24.3 | 33.0 | 38.5 |
| HIGHWAY VEHICLES | 133.2 | 166.2 | 197.7 | 233.3 | 317.7 | 376.9 | 402.5 | 372.0 |
| OTHER | 240.4 | 217.1 | 189.2 | 183.8 | 165.6 | 127.2 | 142.7 | 119.7 |
| TOTAL | 738.0 | 792.6 | 844.9 | 920.5 | 1064.2 | 1097.7 | 1122.6 | 1172.0 |

TABLE 11. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR RHODE ISLAND

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 1.5* | 2.5* | 3.5* | 4.6* | 5.4* | 24.8 | 20.1 | 16.5 | 19.5 | 14.6 |
| INDUSTRIAL | 15.1* | 19.0* | 21.6* | 23.2* | 22.5* | 37.6 | 32.5 | 28.2 | 29.1 | 25.2 |
| COMMERCIAL-RESIDENTIAL | 2.3* | 3.0* | 3.6* | 4.3* | 4.3* | 5.7* | 6.8* | 6.8* | 8.4* | 10.8* |
| PIPELINES | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| HIGHWAY VEHICLES | .0* | .0* | .0* | .0* | .0* | .1 | .2 | .3 | .3 | .2 |
| OTHER | 30.6 | 40.4 | 44.1 | 45.3 | 46.1 | 38.3 | 22.7 | 18.2 | 22.3 | 25.7 |
| TOTAL | 49.4 | 64.9 | 72.7 | 77.4 | 78.3 | 106.5 | 82.3 | 70.0 | 79.5 | 76.5 |

*- MAY NOT INCLUDE ALL EMISSIONS BECAUSE DATUM WAS NOT AVAILABLE



TABLE 12. SUMMARY OF NOX EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR RHODE ISLAND

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | .8* | 1.3* | 1.7* | 2.3* | 2.7* | 5.8 | 4.9 | 3.7 | 4.6 | 4.1 |
| INDUSTRIAL | 5.5* | 7.0* | 7.9* | 8.5* | 8.2* | 11.9 | 10.1 | 8.5 | 8.9 | 8.2 |
| COMMERCIAL-RESIDENTIAL | .2* | .3* | .4* | .4* | .4* | .8* | 1.1* | 1.3* | 1.6* | 1.7* |
| PIPELINES | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| HIGHWAY VEHICLES | .0* | .0* | .1* | .3* | 1.2* | 2.6 | 5.4 | 6.6 | 8.1 | 6.1 |
| OTHER | 14.7 | 19.2 | 20.8 | 21.5 | 21.8 | 19.8 | 12.7 | 9.7 | 11.6 | 12.4 |
| TOTAL | 21.2 | 27.7 | 30.9 | 33.1 | 34.3 | 40.9 | 34.1 | 29.8 | 34.8 | 32.6 |

TABLE 13. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR RHODE ISLAND

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 28.1 | 24.7 | 28.0 | 24.1 | 23.4 | 5.2 | 3.9 | 4.2 |
| INDUSTRIAL | 20.3 | 30.6 | 31.1 | 7.8 | 8.5 | 4.6 | 3.9 | 3.5 |
| COMMERCIAL - RESIDENTIAL | 11.1 | 18.8 | 20.1 | 10.3 | 26.0 | 12.8 | 12.2 | 3.7 |
| PIPELINES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| HIGHWAY VEHICLES | .4 | .6 | .6 | .7 | 1.2 | 1.2* | 1.3 | 1.3 |
| OTHER | 13.3 | 6.6 | 3.5 | 2.9 | 2.7 | .9 | .7 | .7 |
| TOTAL | 73.3 | 81.2 | 83.3 | 45.9 | 61.7 | 24.7 | 21.9 | 13.4 |

TABLE 14. SUMMARY OF NOX EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR RHODE ISLAND

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 6.7 | 8.2 | 7.4 | 5.9 | 4.3 | 2.4 | 1.6 | 2.1 |
| INDUSTRIAL | 5.0 | 9.1 | 10.1 | 3.7 | 3.0 | 1.8 | 1.8 | 1.7 |
| COMMERCIAL - RESIDENTIAL | 2.3 | 3.3 | 5.5 | 4.1 | 6.7 | 4.8 | 4.9 | 6.2 |
| PIPELINES | .0 | .1 | .3 | .1 | .0 | .0 | .0 | .2 |
| HIGHWAY VEHICLES | 8.1 | 11.2 | 12.4 | 14.0 | 25.0 | 28.6* | 27.7 | 24.0 |
| OTHER | 9.5 | 6.6 | 4.8 | 5.5 | 6.7 | 3.4 | 2.4 | 2.1 |
| TOTAL | 31.6 | 38.6 | 40.5 | 33.4 | 45.7 | 41.0 | 38.4 | 36.2 |

TABLE 11. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR SOUTH CAROLINA

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 1.4* | 2.3* | 3.2* | 4.3* | 6.1* | 9.9 | 10.1 | 6.9 | 10.2 | 13.9 |
| INDUSTRIAL | 3.1* | 5.3* | 7.9* | 11.0* | 15.9* | 24.5 | 28.2 | 30.2 | 42.7 | 58.0 |
| COMMERCIAL-RESIDENTIAL | 3.8* | 6.7* | 10.4* | 16.0* | 17.7* | 20.2* | 21.9* | 17.9* | 19.5* | 27.2* |
| PIPELINES | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| HIGHWAY VEHICLES | .0* | .0* | .0* | .0* | .1* | .2 | .3* | .3* | .5* | .5* |
| OTHER | 23.4 | 32.5 | 42.3 | 50.3 | 57.7 | 54.0 | 54.0 | 44.2 | 48.3 | 65.9 |
| TOTAL | 31.8 | 46.8 | 63.8 | 81.6 | 97.4 | 108.7 | 114.5 | 99.6 | 121.3 | 165.5 |

*- MAY NOT INCLUDE ALL EMISSIONS BECAUSE DATUM WAS NOT AVAILABLE



TABLE 12. SUMMARY OF NOX EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR SOUTH CAROLINA

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | .6* | .9* | 1.3* | 1.7* | 2.4* | 3.8 | 3.9 | 2.7 | 4.0 | 5.5 |
| INDUSTRIAL | 1.1* | 1.8* | 2.7* | 3.7* | 5.4* | 8.2 | 9.4 | 10.1 | 14.2 | 19.4 |
| COMMERCIAL-RESIDENTIAL | .3* | .6* | .9* | 1.4* | 1.5* | 1.7* | 1.9* | 1.6* | 1.8* | 2.5* |
| PIPELINES | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| HIGHWAY VEHICLES | .0* | .0* | .1* | .7* | 2.3* | 4.9 | 7.0* | 8.5* | 13.6* | 13.1* |
| OTHER | 20.0 | 21.8 | 23.8 | 25.0 | 26.2 | 26.6 | 109.4 | 26.9 | 38.5 | 38.6 |
| TOTAL | 21.9 | 25.2 | 28.8 | 32.5 | 37.9 | 45.3 | 131.7 | 49.8 | 72.2 | 79.0 |

TABLE 13. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR SOUTH CAROLINA

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 22.4 | 29.7 | 40.7 | 68.5 | 120.8 | 143.5 | 191.7 | 202.8 |
| INDUSTRIAL | 47.2 | 49.5 | 54.5 | 45.8 | 57.5 | 43.5 | 82.1 | 76.4 |
| COMMERCIAL - RESIDENTIAL | 25.2 | 19.9 | 15.8 | 9.6 | 12.6 | 6.3 | 5.3 | 6.8 |
| PIPELINES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| HIGHWAY VEHICLES | 1.1 | 1.5 | 1.7 | 2.5 | 4.3 | 5.6 | 6.9 | 7.6 |
| OTHER | 45.8 | 25.3 | 16.7 | 15.0 | 15.8 | 9.9 | 10.4 | 10.1 |
| TOTAL | 141.7 | 125.9 | 129.5 | 141.5 | 211.1 | 208.7 | 296.4 | 303.6 |

TABLE 14. SUMMARY OF NOX EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR SOUTH CAROLINA

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 7.2 | 15.4 | 24.1 | 36.0 | 62.6 | 60.6 | 81.4 | 90.1 |
| INDUSTRIAL | 15.6 | 22.8 | 29.1 | 32.9 | 28.2 | 22.5 | 31.4 | 34.3 |
| COMMERCIAL - RESIDENTIAL | 6.2 | 5.7 | 7.4 | 5.7 | 6.9 | 5.0 | 5.5 | 8.4 |
| PIPELINES | .0 | 1.3 | 1.5 | 2.9 | 4.1 | 3.3 | 4.9 | 3.8 |
| HIGHWAY VEHICLES | 29.4 | 39.7 | 47.2 | 62.8 | 93.1 | 116.7 | 128.7 | 120.3 |
| OTHER | 31.5 | 25.4 | 21.7 | 21.6 | 26.2 | 16.4 | 16.6 | 13.9 |
| TOTAL | 89.9 | 110.3 | 131.0 | 161.9 | 221.1 | 224.5 | 268.4 | 270.8 |

TABLE 11. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR SOUTH DAKOTA

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 2.4* | 4.0* | 5.4* | 7.3* | 7.7* | 7.2* | 6.3 | 5.0 | 8.4* | 13.0* |
| INDUSTRIAL | 1.0* | 1.4* | 1.7* | 2.1* | 1.8* | 1.3 | 1.1 | 1.2 | 1.6 | 2.3* |
| COMMERCIAL-RESIDENTIAL | 2.7* | 3.8* | 5.0* | 6.6* | 6.9* | 7.9* | 8.4* | 6.6* | 6.7* | 8.7* |
| PIPELINES | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| HIGHWAY VEHICLES | .0* | .0* | .0* | .0* | .1* | .2 | .2* | .2* | .3* | .2* |
| OTHER | 9.1 | 12.2 | 14.5 | 15.4 | 16.0 | 14.2 | 11.1 | 9.3 | 9.2 | 10.9 |
| TOTAL | 15.2 | 21.4 | 26.7 | 31.3 | 32.5 | 30.8 | 27.2 | 22.3 | 26.2 | 35.1 |

*- MAY NOT INCLUDE ALL EMISSIONS BECAUSE DATUM HAS NOT AVAILABLE



TABLE 12. SUMMARY OF NOX EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR SOUTH DAKOTA

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | .6* | 1.0* | 1.3* | 1.8* | 1.9* | 1.9* | 1.7 | 1.5 | 2.5* | 3.9* |
| INDUSTRIAL | 1.3* | 1.7* | 2.1* | 2.5* | 2.2* | 1.6 | 2.4 | 2.4 | 3.3 | 2.7* |
| COMMERCIAL-RESIDENTIAL | .7* | 1.0* | 1.3* | 1.7* | 1.8* | 2.1* | 2.2* | 1.8* | 1.9* | 2.3* |
| PIPELINES | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| HIGHWAY VEHICLES | .0* | .0* | .1* | .5* | 1.8* | 4.0 | 5.4* | 6.3* | 7.1* | 6.3* |
| OTHER | 5.9 | 7.9 | 9.4 | 9.9 | 10.3 | 9.7 | 7.9 | 6.8 | 7.5 | 12.5 |
| TOTAL | 8.4 | 11.6 | 14.3 | 16.5 | 18.1 | 19.2 | 19.7 | 18.8 | 22.3 | 27.8 |

TABLE 13. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR SOUTH DAKOTA

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 13.0 | 12.3 | 5.3 | 5.2 | 53.8 | 32.6 | 46.7 | 38.2 |
| INDUSTRIAL | 2.6 | 2.9 | 4.3 | 7.8 | 3.5 | 3.9 | 5.4 | 4.6 |
| COMMERCIAL - RESIDENTIAL | 2.7 | 2.1 | 5.8 | 4.7 | 2.8 | 1.8 | 1.2 | 1.4 |
| PIPELINES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| HIGHWAY VEHICLES | .5 | .6 | .6 | .8 | 1.5 | 1.5 | 2.0 | 2.2 |
| OTHER | 7.9 | 5.4 | 4.2 | 3.3 | 2.2 | 1.2 | 1.3 | .9 |
| TOTAL | 26.7 | 23.3 | 20.2 | 21.8 | 63.8 | 41.0 | 56.7 | 47.4 |



TABLE 14. SUMMARY OF NOX EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR SOUTH DAKOTA

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 4.0 | 4.1 | 4.0 | 3.3 | 15.5 | 25.7 | 36.3 | 32.4 |
| INDUSTRIAL | 2.3 | 3.4 | 3.4 | 4.9 | 1.8 | 1.8 | 3.1 | 2.4 |
| COMMERCIAL - RESIDENTIAL | 1.2 | 1.2 | 2.7 | 2.8 | 2.6 | 2.2 | 2.0 | 2.7 |
| PIPELINES | .0 | .0 | .1 | .0 | .0 | .0 | .0 | .1 |
| HIGHWAY VEHICLES | 14.5 | 15.5 | 17.6 | 21.6 | 29.3 | 30.2 | 33.7 | 34.5 |
| OTHER | 10.0 | 10.5 | 10.5 | 10.7 | 9.2 | 8.0 | 10.9 | 5.7 |
| TOTAL | 31.9 | 34.7 | 38.3 | 43.3 | 58.4 | 67.8 | 86.1 | 77.8 |

TABLE 11. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR TENNESSEE

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 4.4* | 7.2* | 9.9* | 13.2* | 15.4* | 16.9 | 24.8 | 28.4 | 61.7 | 114.3 |
| INDUSTRIAL | 33.1* | 43.8* | 52.4* | 60.0* | 67.4* | 80.9 | 83.0 | 82.9 | 109.5 | 145.3 |
| COMMERCIAL-RESIDENTIAL | 40.2* | 55.6* | 70.1* | 89.0* | 92.0* | 105.0* | 119.3* | 104.9* | 118.3* | 179.0* |
| PIPELINES | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| HIGHWAY VEHICLES | .0* | .0* | .0* | .0* | .1* | .3 | .5* | .7* | .7* | .8* |
| OTHER | 71.8 | 101.2 | 117.8 | 121.7 | 127.8 | 123.4 | 99.3 | 107.3 | 125.3 | 161.1 |
| TOTAL | 149.5 | 207.9 | 250.2 | 284.0 | 302.7 | 326.5 | 326.8 | 324.2 | 415.5 | 600.5 |

*- MAY NOT INCLUDE ALL EMISSIONS BECAUSE DATUM WAS NOT AVAILABLE



TABLE 12. SUMMARY OF NOX EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR TENNESSEE

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 1.3* | 2.1* | 2.9* | 3.9* | 4.7* | 5.5 | 8.3 | 9.2 | 19.4 | 35.0 |
| INDUSTRIAL | 9.1* | 12.0* | 14.4* | 16.7* | 18.5* | 22.1 | 23.4 | 24.8 | 32.9 | 45.7 |
| COMMERCIAL-RESIDENTIAL | 1.7* | 2.3* | 2.9* | 3.7* | 3.8* | 4.4* | 5.1* | 4.6* | 5.3* | 8.3* |
| PIPELINES | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| HIGHWAY VEHICLES | .0* | .0* | .2* | 1.0* | 3.3* | 7.2 | 12.6* | 18.3* | 18.5* | 20.3* |
| OTHER | 29.9 | 32.7 | 34.9 | 35.5 | 36.8 | 37.8 | 47.5 | 36.4 | 50.4 | 58.8 |
| TOTAL | 41.9 | 49.2 | 55.3 | 60.7 | 67.1 | 76.9 | 96.9 | 93.3 | 126.6 | 168.1 |

TABLE 13. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR TENNESSEE

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 17.9 | 227.0 | 639.1 | 560.0 | 865.0 | 1350.9 | 896.4 | 1003.0 |
| INDUSTRIAL | 110.7 | 108.5 | 78.1 | 135.6 | 91.0 | 56.3 | 188.1 | 122.2 |
| COMMERCIAL - RESIDENTIAL | 151.8 | 96.3 | 34.4 | 24.1 | 18.6 | 9.3 | 10.8 | 8.1 |
| PIPELINES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| HIGHWAY VEHICLES | 1.7 | 2.3 | 2.8 | 3.9 | 6.4 | 9.5 | 12.6 | 12.0 |
| OTHER | 92.9 | 74.7 | 65.7 | 68.0 | 74.0 | 50.4 | 35.2 | 31.4 |
| TOTAL | 375.0 | 508.8 | 820.1 | 791.6 | 1055.1 | 1476.4 | 1143.0 | 1176.6 |

TABLE 14. SUMMARY OF NOX EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR TENNESSEE

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 6.8 | 67.5 | 141.4 | 126.8 | 182.5 | 286.8 | 228.9 | 268.8 |
| INDUSTRIAL | 44.3 | 51.5 | 48.8 | 66.1 | 33.4 | 28.5 | 56.6 | 41.7 |
| COMMERCIAL - RESIDENTIAL | 12.0 | 9.4 | 10.6 | 9.1 | 11.1 | 8.9 | 8.6 | 13.4 |
| PIPELINES | 8.2 | 9.6 | 6.7 | 28.4 | 33.1 | 23.9 | 18.0 | 20.6 |
| HIGHWAY VEHICLES | 41.9 | 56.1 | 70.5 | 92.2 | 124.8 | 189.2 | 214.9 | 182.8 |
| OTHER | 62.6 | 49.9 | 51.3 | 61.1 | 63.9 | 59.8 | 68.0 | 53.4 |
| TOTAL | 175.9 | 243.9 | 329.2 | 383.7 | 448.7 | 597.2 | 595.1 | 580.8 |

TABLE 11. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR TEXAS

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 6.8* | 11.2* | 15.3* | 20.4* | 27.3* | 39.9 | 37.3 | 22.5 | 27.0 | 28.8 |
| INDUSTRIAL | 37.5* | 47.5* | 54.1* | 60.4* | 53.1* | 98.6 | 87.8 | 79.5 | 90.8 | 94.6 |
| COMMERCIAL-RESIDENTIAL | 19.2* | 25.5* | 30.6* | 36.7* | 37.0* | 43.8* | 45.2* | 34.6* | 39.7* | 181.5* |
| PIPELINES | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| HIGHWAY VEHICLES | .0* | .0* | .0* | .1* | .5* | 1.1 | 1.8* | 2.1* | 2.9* | 2.8* |
| OTHER | 325.4 | 394.8 | 446.0 | 470.5 | 478.8 | 595.4 | 585.4 | 521.3 | 522.3 | 716.3 |
| TOTAL | 388.9 | 479.1 | 546.0 | 588.2 | 596.7 | 778.8 | 757.5 | 659.9 | 682.7 | 1024.1 |

*- MAY NOT INCLUDE ALL EMISSIONS BECAUSE DATUM HAS NOT AVAILABLE



TABLE 12. SUMMARY OF NOX EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR TEXAS

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | .8* | 1.3* | 1.8* | 2.4* | 5.2* | 9.3 | 15.5 | 11.6 | 16.0 | 29.2 |
| INDUSTRIAL | 3.9* | 5.0* | 5.7* | 11.6* | 29.7* | 92.2 | 276.9 | 278.4 | 384.8 | 536.4 |
| COMMERCIAL-RESIDENTIAL | 1.6* | 2.1* | 2.6* | 3.3* | 3.6* | 4.5* | 5.9* | 4.5* | 6.5* | 26.2* |
| PIPELINES | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| HIGHWAY VEHICLES | .0* | .1* | .7* | 3.6* | 12.7* | 27.2 | 46.2* | 52.4* | 74.2* | 72.3* |
| OTHER | 53.5 | 60.4 | 65.8 | 66.9 | 68.3 | 359.2 | 399.7 | 308.8 | 293.8 | 482.6 |
| TOTAL | 59.9 | 68.9 | 76.6 | 87.9 | 119.4 | 492.4 | 744.2 | 655.7 | 775.3 | 1146.8 |

TABLE 13. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR TEXAS

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | .4* | .2* | .3* | .3* | 1.4* | 85.1 | 182.6 | 297.6 |
| INDUSTRIAL | 47.8 | 110.0 | 98.1 | 62.6 | 50.6 | 138.7 | 185.1 | 212.7 |
| COMMERCIAL - RESIDENTIAL | 24.3 | 33.3 | 6.7 | 2.6 | 14.9 | 44.4 | 45.3 | 9.9 |
| PIPELINES | .0 | .0 | .2 | .2 | .3 | .3 | .2 | .2 |
| HIGHWAY VEHICLES | 7.0 | 8.8 | 9.8 | 13.3 | 18.8 | 25.5 | 35.7 | 38.2 |
| OTHER | 710.7 | 727.6 | 685.0 | 693.9 | 774.1 | 740.8 | 806.4 | 753.3 |
| TOTAL | 790.3 | 880.1 | 800.1 | 772.8 | 860.1 | 1034.7 | 1255.5 | 1312.0 |

*- MAY NOT INCLUDE ALL EMISSIONS BECAUSE DATUM WAS NOT AVAILABLE



TABLE 14. SUMMARY OF NOX EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR TEXAS

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 40.9 | 67.1 | 99.9 | 159.4 | 260.1 | 402.2 | 560.4 | 688.4 |
| INDUSTRIAL | 655.1 | 728.0 | 709.3 | 662.5 | 141.5 | 134.5 | 152.5 | 167.2 |
| COMMERCIAL - RESIDENTIAL | 11.5 | 16.0 | 14.2 | 14.8 | 24.9 | 28.0 | 34.6 | 46.1 |
| PIPELINES | 23.3 | 52.1 | 627.3 | 810.1 | 1082.2 | 1056.5 | 1041.3 | 802.0 |
| HIGHWAY VEHICLES | 153.5 | 195.0 | 226.9 | 293.1 | 388.6 | 487.8 | 606.9 | 588.2 |
| OTHER | 301.6 | 203.5 | 213.2 | 221.6 | 242.2 | 271.8 | 334.7 | 257.2 |
| TOTAL | 1185.9 | 1261.7 | 1890.8 | 2161.5 | 2139.4 | 2380.9 | 2730.3 | 2549.1 |

TABLE 11. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR UTAH

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | .0* | .1* | .1* | .1* | .2* | .3 | .4 | .5 | 1.0 | 1.9 |
| INDUSTRIAL | 3.8* | 5.5* | 8.3* | 10.2* | 12.2* | 13.9 | 12.6 | 10.7 | 12.4 | 14.9 |
| COMMERCIAL-RESIDENTIAL | 6.1* | 9.5* | 13.5* | 19.1* | 20.6* | 23.5* | 24.5* | 18.7* | 18.3* | 24.1* |
| PIPELINES | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| HIGHWAY VEHICLES | .0* | .0* | .0* | .0* | .0* | .1 | .1 | .2 | .2 | .2 |
| OTHER | 51.2 | 93.2 | 179.4 | 241.5 | 156.1 | 314.3 | 253.8 | 177.6 | 594.1 | 529.5 |
| TOTAL | 61.2 | 108.3 | 201.2 | 270.9 | 189.1 | 352.0 | 291.4 | 207.7 | 626.1 | 570.6 |

*- MAY NOT INCLUDE ALL EMISSIONS BECAUSE DATUM WAS NOT AVAILABLE



TABLE 12. SUMMARY OF NOX EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR UTAH

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | .0* | .1* | .1* | .1* | .1* | .2 | .3 | .3 | .7 | 1.3 |
| INDUSTRIAL | 2.1* | 3.1* | 4.4* | 5.5* | 6.5* | 7.5 | 8.5 | 10.2 | 12.9 | 16.6 |
| COMMERCIAL-RESIDENTIAL | .8* | 1.2* | 1.7* | 2.4* | 2.6* | 2.9* | 3.1* | 2.5* | 2.5* | 3.5* |
| PIPELINES | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| HIGHWAY VEHICLES | .0* | .0* | .0* | .2* | .6* | 1.3 | 2.4 | 2.8 | 4.2 | 4.3 |
| OTHER | 4.4 | 5.7 | 6.9 | 7.6 | 8.2 | 10.4 | 10.1 | 8.6 | 8.8 | 13.9 |
| TOTAL | 7.3 | 10.1 | 13.1 | 15.8 | 18.0 | 22.3 | 24.4 | 24.3 | 29.1 | 39.5 |

TABLE 13. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR UTAH

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 2.4 | 9.4 | 16.6 | 11.7 | 10.2 | 19.6 | 25.6 | 27.7 |
| INDUSTRIAL | 51.8 | 50.1 | 31.0 | 28.0 | 26.0 | 29.8 | 33.6 | 23.7 |
| COMMERCIAL - RESIDENTIAL | 12.2 | 8.9 | 8.9 | 8.1 | 6.9 | 7.6 | 8.0 | 9.2 |
| PIPELINES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| HIGHWAY VEHICLES | .7 | .9 | 1.0 | 1.5 | 2.2 | 2.5 | 3.1 | 3.6 |
| OTHER | 530.6 | 336.4 | 220.9 | 339.1 | 238.4 | 55.8 | 51.6 | 49.3 |
| TOTAL | 597.9 | 405.6 | 278.4 | 388.5 | 283.7 | 115.2 | 122.0 | 113.6 |

TABLE 14. SUMMARY OF NOX EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR UTAH

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 2.0 | 8.1 | 9.6 | 7.1 | 8.3 | 23.8 | 35.4 | 61.5 |
| INDUSTRIAL | 25.3 | 28.7 | 20.1 | 28.0 | 12.3 | 13.8 | 16.7 | 11.3 |
| COMMERCIAL - RESIDENTIAL | 2.4 | 2.4 | 3.6 | 4.2 | 4.4 | 5.4 | 4.8 | 10.5 |
| PIPELINES | .0 | .0 | .1 | .5 | 1.4 | 9.4 | 11.6 | 10.6 |
| HIGHWAY VEHICLES | 10.7 | 13.1 | 16.5 | 22.7 | 31.8 | 38.9 | 45.5 | 48.4 |
| OTHER | 33.3 | 26.4 | 26.7 | 27.6 | 31.3 | 33.4 | 31.5 | 32.5 |
| TOTAL | 73.7 | 78.7 | 76.7 | 90.2 | 89.6 | 124.8 | 145.7 | 174.8 |

TABLE 11. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR VERMONT

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | .9* | 1.5* | 2.0* | 2.7* | 3.0* | 3.2 | 2.7 | 1.7 | 2.3 | 2.8 |
| INDUSTRIAL | 6.1* | 8.4* | 10.5* | 12.6* | 12.7* | 12.4 | 9.7 | 7.4 | 7.9* | 8.2* |
| COMMERCIAL-RESIDENTIAL | .9* | 1.3* | 1.8* | 2.3* | 2.5* | 3.0* | 3.4* | 3.0* | 3.2* | 4.2* |
| PIPELINES | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| HIGHWAY VEHICLES | .0* | .0* | .0* | .0* | .0* | .1 | .1 | .1 | .2 | .1 |
| OTHER | 26.7 | 35.5 | 39.0 | 41.2 | 42.2 | 33.0 | 17.0 | 13.7 | 18.3 | 21.4 |
| TOTAL | 34.6 | 46.7 | 53.3 | 58.8 | 60.4 | 51.7 | 32.9 | 25.9 | 31.8 | 36.7 |

*- MAY NOT INCLUDE ALL EMISSIONS BECAUSE DATUM WAS NOT AVAILABLE



TABLE 12. SUMMARY OF NOX EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR VERMONT

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | .4* | .7* | 1.0* | 1.3* | 1.5* | 1.7 | 1.4 | .9 | 1.2 | 1.4 |
| INDUSTRIAL | 2.2* | 3.1* | 3.8* | 4.6* | 4.6* | 4.5 | 3.5 | 2.7 | 2.8* | 3.0* |
| COMMERCIAL-RESIDENTIAL | .1* | .1* | .2* | .2* | .2* | .4* | .4* | .4* | .5* | .6* |
| PIPELINES | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| HIGHWAY VEHICLES | .0* | .0* | .0* | .2* | .7* | 1.5 | 2.8 | 3.1 | 4.2 | 3.2 |
| OTHER | 13.7 | 17.9 | 19.2 | 20.1 | 20.4 | 16.0 | 8.0 | 6.4 | 8.8 | 10.0 |
| TOTAL | 16.5 | 21.8 | 24.3 | 26.5 | 27.4 | 24.0 | 16.1 | 13.6 | 17.5 | 18.2 |

TABLE 13. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR VERMONT

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | .2 | 1.8 | .8 | 1.7 | 3.6 | .4 | .0 | .0 |
| INDUSTRIAL | 1.3 | 1.4 | 2.2 | 1.6 | 2.3 | 1.0 | 1.9 | 1.4 |
| COMMERCIAL - RESIDENTIAL | 1.0 | .7 | 3.3 | 6.2 | 5.3 | 3.7 | 5.6 | 3.6 |
| PIPELINES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| HIGHWAY VEHICLES | .2 | .3 | .3 | .4 | .6 | .8 | 1.0 | 1.1 |
| OTHER | 9.5 | 5.1 | 2.4 | 1.7 | 1.6 | .6 | .6 | .7 |
| TOTAL | 12.1 | 9.3 | 9.0 | 11.6 | 13.3 | 6.4 | 9.2 | 6.7 |



TABLE 14. SUMMARY OF NOX EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR VERMONT

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | .2 | 1.0 | .3 | .5 | 1.1 | .4 | .0 | .2 |
| INDUSTRIAL | .6 | .7 | .9 | .7 | 1.0 | .7 | 1.3 | 1.0 |
| COMMERCIAL - RESIDENTIAL | .8 | .6 | 1.7 | 2.4 | 2.7 | 2.1 | 2.7 | 2.4 |
| PIPELINES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| HIGHWAY VEHICLES | 6.8 | 8.1 | 9.0 | 11.3 | 14.6 | 18.4 | 19.9 | 18.6 |
| OTHER | 5.8 | 4.9 | 4.2 | 3.1 | 3.4 | 2.0 | 2.0 | 2.9 |
| TOTAL | 14.2 | 15.2 | 16.2 | 18.1 | 22.8 | 23.6 | 25.9 | 25.0 |

TABLE 11. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR VIRGINIA

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 4.5* | 7.4* | 10.1* | 13.5* | 16.7* | 22.9 | 23.4 | 18.6* | 30.2* | 47.3* |
| INDUSTRIAL | 21.6* | 34.2* | 44.1* | 57.3* | 60.4* | 61.7 | 61.5 | 63.9* | 87.2* | 116.4* |
| COMMERCIAL-RESIDENTIAL | 8.1* | 12.8* | 18.3* | 26.2* | 28.4* | 33.2* | 43.1* | 45.4* | 58.3* | 93.5* |
| PIPELINES | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| HIGHWAY VEHICLES | .0* | .0* | .0* | .0* | .1* | .3 | .5 | .7 | 1.0 | .9 |
| OTHER | 58.4 | 81.2 | 102.9 | 118.9 | 135.6 | 132.8 | 127.2 | 107.7 | 118.8 | 184.4 |
| TOTAL | 92.6 | 135.6 | 175.5 | 215.9 | 241.1 | 251.0 | 255.8 | 236.2 | 295.3 | 442.5 |

*- MAY NOT INCLUDE ALL EMISSIONS BECAUSE DATUM WAS NOT AVAILABLE



TABLE 12. SUMMARY OF NOX EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR VIRGINIA

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 1.9* | 3.2* | 4.3* | 5.8* | 7.1* | 9.4 | 9.7 | 7.7* | 13.0* | 20.3* |
| INDUSTRIAL | 8.1* | 12.4* | 16.6* | 21.5* | 22.6* | 22.9 | 22.7 | 23.6* | 32.2* | 43.1* |
| COMMERCIAL-RESIDENTIAL | .8* | 1.3* | 1.8* | 2.6* | 2.9* | 3.4* | 4.4* | 4.7* | 6.0* | 9.7* |
| PIPELINES | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| HIGHWAY VEHICLES | .0* | .0* | .2* | 1.0* | 3.6* | 7.8 | 13.5 | 16.8 | 24.7 | 23.5 |
| OTHER | 29.4 | 34.3 | 38.9 | 42.0 | 45.3 | 57.2 | 71.4 | 48.5 | 50.5 | 93.6 |
| TOTAL | 40.2 | 51.2 | 61.9 | 73.0 | 81.5 | 100.7 | 121.8 | 101.3 | 126.4 | 190.2 |

TABLE 13. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR VIRGINIA

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 81.5 | 96.5 | 159.8 | 211.0 | 279.1 | 222.7 | 223.1 | 159.4 |
| INDUSTRIAL | 110.5 | 108.8 | 103.2 | 120.7 | 100.2 | 72.8 | 71.2 | 94.3 |
| COMMERCIAL - RESIDENTIAL | 81.5 | 62.2 | 51.8 | 44.1 | 69.5 | 37.2 | 27.0 | 14.3 |
| PIPELINES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| HIGHWAY VEHICLES | 2.1 | 2.8 | 3.3 | 5.6 | 7.5 | 9.3 | 10.6 | 11.6 |
| OTHER | 112.8 | 68.0 | 41.9 | 40.6 | 43.7 | 32.0 | 32.0 | 33.6 |
| TOTAL | 388.4 | 338.4 | 360.0 | 422.0 | 500.0 | 374.0 | 364.0 | 313.2 |

TABLE 14. SUMMARY OF NOX EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR VIRGINIA

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 34.2 | 41.3 | 72.7 | 95.8 | 99.2 | 81.1 | 88.8 | 83.2 |
| INDUSTRIAL | 42.0 | 44.6 | 48.6 | 58.6 | 45.7 | 36.7 | 32.9 | 42.8 |
| COMMERCIAL - RESIDENTIAL | 13.2 | 12.2 | 17.9 | 16.2 | 21.1 | 14.9 | 15.0 | 22.2 |
| PIPELINES | .1 | 2.7 | 4.9 | 8.4 | 9.7 | 3.8 | 3.4 | 10.3 |
| HIGHWAY VEHICLES | 52.4 | 70.1 | 85.6 | 117.2 | 160.8 | 193.7 | 202.7 | 192.0 |
| OTHER | 64.3 | 64.2 | 53.1 | 67.7 | 84.1 | 57.6 | 58.3 | 60.5 |
| TOTAL | 206.2 | 235.2 | 282.7 | 363.9 | 420.6 | 387.8 | 401.0 | 411.1 |

TABLE 11. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR WASHINGTON

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | .6* | 1.0* | 1.4* | 1.8* | 1.6* | 1.2 | .5 | .4 | .3 | .5 |
| INDUSTRIAL | 3.0* | 4.5* | 6.2* | 9.8* | 10.9* | 28.4 | 23.7* | 23.2* | 22.4* | 42.5* |
| COMMERCIAL-RESIDENTIAL | 4.0* | 6.4* | 9.1* | 13.0* | 14.1* | 17.0* | 18.2* | 15.0* | 14.9* | 26.4* |
| PIPELINES | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| HIGHWAY VEHICLES | .0* | .0* | .0* | .0* | .2* | .4 | .6* | .6* | .9* | .9* |
| OTHER | 28.5 | 42.7 | 56.3 | 65.7 | 72.9 | 79.3 | 75.9 | 60.7 | 76.5 | 93.8 |
| TOTAL | 36.2 | 54.6 | 72.9 | 90.4 | 99.7 | 126.3 | 118.9 | 100.0 | 115.0 | 164.1 |

*- MAY NOT INCLUDE ALL EMISSIONS BECAUSE DATUM WAS NOT AVAILABLE



TABLE 12. SUMMARY OF NOX EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR WASHINGTON

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | .4* | .7* | 1.0* | 1.3* | 1.2* | 2.2 | 1.4 | 1.2 | .8 | 1.4 |
| INDUSTRIAL | 1.8* | 2.8* | 3.8* | 5.3* | 5.5* | 8.3 | 7.1* | 6.9* | 7.6* | 12.1* |
| COMMERCIAL-RESIDENTIAL | .6* | .9* | 1.3* | 1.9* | 2.0* | 2.5* | 2.6* | 2.1* | 2.1* | 3.5* |
| PIPELINES | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| HIGHWAY VEHICLES | .0* | .0* | .2* | 1.2* | 4.4* | 9.4 | 15.0* | 15.9* | 22.0* | 21.9* |
| OTHER | 15.8 | 20.8 | 26.0 | 28.7 | 30.4 | 68.1 | 68.9 | 56.7 | 39.4 | 72.0 |
| TOTAL | 18.7 | 25.3 | 32.3 | 38.4 | 43.5 | 90.5 | 95.1 | 82.8 | 71.8 | 110.9 |

TABLE 13. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR WASHINGTON

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | .5 | .5 | .0 | .0 | .0 | 37.0 | 90.0 | 82.5 |
| INDUSTRIAL | 49.1 | 71.1 | 31.4 | 24.4 | 37.1 | 37.9 | 47.1 | 48.5 |
| COMMERCIAL - RESIDENTIAL | 14.9 | 14.4 | 44.7 | 32.6 | 33.4 | 19.4 | 14.9 | 20.3 |
| PIPELINES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| HIGHWAY VEHICLES | 2.0 | 2.3 | 2.5 | 3.1 | 5.2 | 6.0 | 8.3 | 8.7 |
| OTHER | 133.6 | 114.4 | 96.4 | 99.6 | 99.2 | 91.5 | 131.9 | 119.5 |
| TOTAL | 200.1 | 202.7 | 175.0 | 159.6 | 174.9 | 191.8 | 292.1 | 279.5 |

TABLE 14. SUMMARY OF NOX EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR WASHINGTON

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 1.6 | 1.8 | .1 | .0 | .0 | 42.8 | 54.8 | 59.8 |
| INDUSTRIAL | 13.3 | 17.6 | 29.8 | 37.6 | 20.6 | 22.2 | 25.3 | 22.5 |
| COMMERCIAL - RESIDENTIAL | 4.6 | 3.9 | 10.4 | 10.0 | 10.9 | 8.7 | 8.0 | 15.6 |
| PIPELINES | .0 | .0 | .5 | .9 | 8.0 | 7.3 | 7.9 | 4.6 |
| HIGHWAY VEHICLES | 40.3 | 47.9 | 54.9 | 67.8 | 113.4 | 129.7 | 151.6 | 142.6 |
| OTHER | 59.6 | 46.1 | 46.0 | 54.8 | 44.7 | 43.7 | 58.4 | 52.9 |
| TOTAL | 119.4 | 117.3 | 141.8 | 171.1 | 197.6 | 254.4 | 306.1 | 297.9 |

TABLE 11. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR WEST VIRGINIA

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 4.6* | 7.6* | 10.3* | 13.8* | 25.5* | 49.9 | 57.1 | 41.1 | 65.0 | 94.5 |
| INDUSTRIAL | 31.7* | 51.0* | 73.0* | 98.6* | 106.7* | 112.1 | 99.4 | 88.5 | 107.6 | 130.6 |
| COMMERCIAL-RESIDENTIAL | 3.9* | 6.6* | 9.9* | 14.8* | 16.2* | 18.5* | 20.0* | 16.2* | 16.8* | 24.0* |
| PIPELINES | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| HIGHWAY VEHICLES | .0* | .0* | .0* | .0* | .1* | .2 | .3* | .4* | .5* | .5* |
| OTHER | 43.7 | 68.8 | 96.7 | 126.3 | 128.0 | 149.3 | 116.5 | 98.3 | 94.1 | 135.8 |
| TOTAL | 83.9 | 134.0 | 190.0 | 253.6 | 276.5 | 330.0 | 293.3 | 244.5 | 284.0 | 385.3 |

*- MAY NOT INCLUDE ALL EMISSIONS BECAUSE DATUM WAS NOT AVAILABLE



TABLE 12. SUMMARY OF NOX EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR WEST VIRGINIA

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 1.6* | 2.6* | 3.6* | 4.8* | 8.8* | 17.6 | 20.1 | 14.5 | 22.8 | 33.6 |
| INDUSTRIAL | 10.3* | 16.6* | 61.8* | 78.2* | 82.1* | 65.7 | 54.9 | 45.7 | 58.8 | 66.2 |
| COMMERCIAL-RESIDENTIAL | .4* | .6* | 1.6* | 2.3* | 2.6* | 2.9* | 3.1* | 2.2* | 2.9* | 3.8* |
| PIPELINES | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| HIGHWAY VEHICLES | .0* | .0* | .1* | .6* | 2.2* | 4.7 | 8.3* | 9.6* | 13.4* | 11.7* |
| OTHER | 12.0 | 15.6 | 19.2 | 21.7 | 24.1 | 23.6 | 29.8 | 19.2 | 20.3 | 29.6 |
| TOTAL | 24.3 | 35.4 | 86.3 | 107.5 | 119.7 | 114.5 | 116.1 | 91.2 | 118.1 | 144.8 |

TABLE 13. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR WEST VIRGINIA

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 130.7 | 210.6 | 321.0 | 438.2 | 746.7 | 1300.4 | 1092.6 | 1059.7 |
| INDUSTRIAL | 127.5 | 127.5 | 107.4 | 280.4 | 158.6 | 127.6 | 112.1 | 94.8 |
| COMMERCIAL - RESIDENTIAL | 16.4 | 10.6 | 9.5 | 9.6 | 46.2 | 6.7 | 8.2 | 6.8 |
| PIPELINES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| HIGHWAY VEHICLES | 1.0 | 1.2 | 1.4 | 1.6 | 3.0 | 3.0 | 3.2 | 3.8 |
| OTHER | 95.3 | 56.5 | 44.5 | 41.1 | 43.1 | 39.2 | 41.6 | 39.7 |
| TOTAL | 371.0 | 406.5 | 483.8 | 771.0 | 997.6 | 1476.8 | 1257.7 | 1204.8 |

TABLE 14. SUMMARY OF NOX EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR WEST VIRGINIA

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 45.4 | 73.4 | 67.9 | 92.5 | 165.5 | 304.2 | 299.5 | 351.9 |
| INDUSTRIAL | 65.3 | 64.6 | 54.9 | 91.7 | 54.5 | 39.7 | 34.2 | 29.5 |
| COMMERCIAL - RESIDENTIAL | 5.0 | 4.8 | 5.4 | 5.3 | 10.8 | 5.7 | 6.2 | 12.5 |
| PIPELINES | 5.2 | 9.2 | 10.5 | 22.5 | 13.1 | 19.8 | 20.6 | 19.6 |
| HIGHWAY VEHICLES | 25.8 | 30.4 | 33.8 | 39.9 | 54.6 | 60.8 | 60.3 | 59.2 |
| OTHER | 26.3 | 20.4 | 21.0 | 19.1 | 19.6 | 17.4 | 25.0 | 27.0 |
| TOTAL | 173.0 | 202.8 | 193.6 | 271.0 | 318.1 | 447.5 | 445.8 | 499.7 |

TABLE 11. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR WISCONSIN

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 12.8* | 21.1* | 28.9* | 38.6* | 44.8* | 50.7 | 50.3 | 39.9 | 68.2 | 107.6 |
| INDUSTRIAL | 80.3* | 111.4* | 140.2* | 169.2* | 214.4* | 289.8 | 271.3 | 227.9 | 262.3 | 309.4 |
| COMMERCIAL-RESIDENTIAL | 44.1* | 64.1* | 84.8* | 113.3* | 119.5* | 136.4* | 145.8* | 116.2* | 119.5* | 163.8* |
| PIPELINES | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| HIGHWAY VEHICLES | .0* | .0* | .0* | .1* | .3* | .6 | 1.0 | 1.0 | 1.3 | 1.2 |
| OTHER | 118.5 | 161.1 | 192.4 | 209.9 | 223.7 | 187.0 | 150.9 | 120.3 | 124.7 | 164.6 |
| TOTAL | 255.7 | 357.7 | 446.4 | 531.1 | 602.6 | 664.5 | 619.4 | 505.4 | 575.9 | 746.6 |

*- MAY NOT INCLUDE ALL EMISSIONS BECAUSE DATUM WAS NOT AVAILABLE



TABLE 12. SUMMARY OF NOX EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR WISCONSIN

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 2.6* | 4.4* | 6.0* | 8.0* | 9.2* | 10.6 | 10.5 | 8.3 | 14.4 | 22.5 |
| INDUSTRIAL | 14.2* | 19.7* | 24.8* | 29.9* | 37.8* | 51.2 | 47.9 | 40.3 | 46.4 | 54.8 |
| COMMERCIAL-RESIDENTIAL | 3.0* | 4.3* | 5.7* | 7.6* | 8.0* | 9.1* | 9.8* | 7.8* | 8.1* | 11.2* |
| PIPELINES | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| HIGHWAY VEHICLES | .0* | .1* | .4* | 1.9* | 6.7* | 14.5 | 25.7 | 25.2 | 32.8 | 29.8 |
| OTHER | 39.1 | 46.1 | 50.3 | 52.3 | 53.6 | 48.9 | 43.5 | 27.3 | 27.7 | 39.1 |
| TOTAL | 58.8 | 74.4 | 87.0 | 99.6 | 115.3 | 134.4 | 137.4 | 109.0 | 129.4 | 157.3 |

TABLE 13. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR WISCONSIN

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 163.1 | 228.5 | 273.6 | 352.9 | 608.8 | 555.9 | 589.9 | 523.3 |
| INDUSTRIAL | 116.1 | 110.0 | 160.2 | 205.9 | 189.2 | 70.2 | 89.4 | 93.2 |
| COMMERCIAL - RESIDENTIAL | 55.0 | 36.3 | 122.4 | 97.0 | 72.2 | 29.5 | 22.3 | 10.0 |
| PIPELINES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| HIGHWAY VEHICLES | 2.2 | 2.7 | 2.9 | 3.9 | 6.5 | 7.8 | 10.4 | 10.2 |
| OTHER | 119.3 | 65.2 | 41.4 | 41.0 | 40.5 | 31.0 | 32.1 | 29.9 |
| TOTAL | 455.8 | 442.7 | 600.5 | 700.8 | 917.2 | 694.4 | 744.0 | 666.7 |

TABLE 14. SUMMARY OF NOX EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR WISCONSIN

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 34.1 | 47.4 | 60.3 | 80.3 | 131.1 | 139.7 | 144.8 | 169.4 |
| INDUSTRIAL | 23.0 | 24.6 | 53.5 | 80.8 | 55.5 | 31.7 | 35.5 | 34.7 |
| COMMERCIAL - RESIDENTIAL | 7.4 | 6.8 | 27.0 | 27.3 | 26.1 | 20.6 | 21.4 | 33.9 |
| PIPELINES | .8 | .5 | .7 | 1.9 | 8.2 | 6.2 | 2.1 | 10.3 |
| HIGHWAY VEHICLES | 55.5 | 67.5 | 77.6 | 95.5 | 139.1 | 160.6 | 163.6 | 162.6 |
| OTHER | 46.9 | 41.0 | 37.9 | 40.4 | 45.9 | 29.8 | 28.6 | 27.2 |
| TOTAL | 167.7 | 187.7 | 257.0 | 326.2 | 405.9 | 388.5 | 416.1 | 438.1 |

TABLE 11. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR WYOMING

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | .7* | 1.2* | 1.7* | 2.3* | 2.4* | 2.0 | 1.6 | 1.2 | 1.8 | 2.6 |
| INDUSTRIAL | 3.8* | 4.6* | 4.8* | 4.7* | 4.7* | 9.2 | 8.3 | 7.4 | 8.7 | 11.7 |
| COMMERCIAL-RESIDENTIAL | 3.2* | 4.0* | 4.4* | 4.8* | 4.6* | 5.3* | 5.5* | 4.1* | 3.9* | 17.1* |
| PIPELINES | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| HIGHWAY VEHICLES | .0* | .0* | .0* | .0* | .0* | .0 | .1* | .1* | .1* | .1* |
| OTHER | 20.5 | 19.5 | 21.0 | 20.6 | 20.4 | 21.5 | 21.0 | 19.2 | 19.6 | 26.7 |
| TOTAL | 28.3 | 29.4 | 31.9 | 32.3 | 32.1 | 38.1 | 36.5 | 31.9 | 34.1 | 58.1 |

*- MAY NOT INCLUDE ALL EMISSIONS BECAUSE DATUM WAS NOT AVAILABLE



TABLE 12. SUMMARY OF NOX EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR WYOMING

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | .5* | .9* | 1.2* | 1.6* | 1.7* | 1.5 | 1.2 | 1.0 | 1.5 | 2.0 |
| INDUSTRIAL | 2.3* | 2.8* | 2.9* | 2.8* | 8.4* | 28.9 | 25.0 | 7.0 | 9.0 | 10.0 |
| COMMERCIAL-RESIDENTIAL | .6* | .7* | .8* | .8* | .8* | 1.0* | 1.1* | .8* | .9* | 2.4* |
| PIPELINES | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* | .0* |
| HIGHWAY VEHICLES | .0* | .0* | .0* | .1* | .4* | .8 | 1.4* | 1.8* | 2.6* | 2.3* |
| OTHER | 3.8 | 4.6 | 4.9 | 4.6 | 4.5 | 15.9 | 15.1 | 13.4 | 14.2 | 21.9 |
| TOTAL | 7.2 | 8.9 | 9.8 | 10.0 | 15.8 | 48.2 | 43.9 | 24.0 | 28.2 | 38.5 |

TABLE 13. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR WYOMING

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 3.2 | 5.4 | 19.1 | 45.4 | 38.5 | 76.4 | 113.7 | 167.7 |
| INDUSTRIAL | 13.2 | 11.3 | 7.3 | 10.7 | 9.3 | 16.1 | 32.0 | 37.9 |
| COMMERCIAL - RESIDENTIAL | 2.0 | 1.9 | 3.7 | 3.1 | 3.7 | 4.6 | 8.9 | 1.9 |
| PIPELINES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| HIGHWAY VEHICLES | .4 | .5 | .6 | .8 | 1.2 | 1.7 | 2.4 | 2.4 |
| OTHER | 27.8 | 26.3 | 27.6 | 29.9 | 32.2 | 30.1 | 32.3 | 32.7 |
| TOTAL | 46.6 | 45.5 | 58.3 | 90.0 | 84.9 | 128.9 | 189.2 | 242.7 |

TABLE 14. SUMMARY OF NOX EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR WYOMING

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 2.6 | 4.3 | 9.6 | 22.4 | 41.9 | 84.1 | 133.3 | 190.6 |
| INDUSTRIAL | 13.5 | 11.6 | 15.5 | 16.2 | 6.9 | 10.9 | 20.5 | 23.1 |
| COMMERCIAL - RESIDENTIAL | 1.0 | 1.2 | 1.3 | 1.6 | 2.3 | 2.3 | 2.9 | 2.6 |
| PIPELINES | .2 | 15.1 | 2.2 | 2.8 | 56.4 | 25.5 | 34.2 | 29.5 |
| HIGHWAY VEHICLES | 7.1 | 9.2 | 11.0 | 13.6 | 17.9 | 24.1 | 30.9 | 29.9 |
| OTHER | 24.6 | 22.1 | 27.1 | 28.4 | 30.3 | 29.9 | 37.5 | 51.8 |
| TOTAL | 49.0 | 63.5 | 66.8 | 85.0 | 155.7 | 176.8 | 259.3 | 327.5 |

TABLE 11. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR THE U.S.

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 412.1 | 682.5 | 933.2 | 1245.2 | 1552.4 | 2115.6 | 2084.3 | 1527.3 | 2384.9 | 3445.2 |
| INDUSTRIAL | 3229.1 | 4491.7 | 5644.8 | 6771.0 | 7056.4 | 7920.2 | 6729.5 | 5471.9 | 6124.5 | 6973.0 |
| COMMERCIAL-RESIDENTIAL | 1137.8 | 1616.2 | 2094.4 | 2739.6 | 2864.4 | 3315.7 | 3630.1 | 3035.0 | 3241.0 | 5033.7 |
| PIPELINES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| HIGHWAY VEHICLES | .0 | .1 | .5 | 2.8 | 9.8 | 21.1 | 35.6 | 39.6 | 53.0 | 46.1 |
| OTHER | 5209.3 | 7169.6 | 8602.0 | 9531.6 | 9661.4 | 9890.4 | 8627.0 | 6904.0 | 8715.6 | 10509.3 |
| TOTAL | 9988.4 | 13960.0 | 17274.9 | 20290.2 | 21144.4 | 23263.1 | 21106.4 | 16977.8 | 20519.1 | 26007.3 |

TABLE 12. SUMMARY OF NOX EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR THE U.S.

| SOURCE CATEGORY | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 |
|---|---|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 99.3 | 164.4 | 224.7 | 299.9 | 383.7 | 544.5 | 557.2 | 418.1 | 646.1 | 949.8 |
| INDUSTRIAL | 690.7 | 965.1 | 1432.8 | 1724.2 | 1859.8 | 2306.9 | 2361.0 | 1879.6 | 2280.6 | 2824.1 |
| COMMERCIAL-RESIDENTIAL | 71.4 | 102.4 | 142.3 | 186.9 | 200.0 | 234.1 | 262.7 | 225.6 | 257.1 | 409.9 |
| PIPELINES | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| HIGHWAY VEHICLES | .3 | 2.1 | 13.9 | 71.2 | 249.0 | 535.6 | 902.8 | 1005.4 | 1345.3 | 1170.0 |
| OTHER | 1748.8 | 2079.9 | 2288.6 | 2390.7 | 2466.8 | 3680.9 | 3934.1 | 3109.2 | 3028.8 | 4193.9 |
| TOTAL | 2610.4 | 3313.9 | 4102.4 | 4672.9 | 5159.3 | 7302.0 | 8017.8 | 6637.9 | 7557.9 | 9547.6 |

TABLE 13. SUMMARY OF SO2 EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR THE U.S.

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 4526.4 | 6570.7 | 9249.7 | 12625.0 | 17691.9 | 19489.1 | 17261.0 | 17985.6 |
| INDUSTRIAL | 5297.6 | 5510.9 | 4972.7 | 5460.2 | 4929.3 | 3367.6 | 3990.6 | 3860.4 |
| COMMERCIAL - RESIDENTIAL | 2873.0 | 1983.3 | 2096.3 | 1826.4 | 1932.9 | 1342.7 | 1239.2 | 926.2 |
| PIPELINES | .0 | .1 | .3 | .4 | .6 | .6 | .6 | .5 |
| HIGHWAY VEHICLES | 101.1 | 128.1 | 144.2 | 198.6 | 297.7 | 366.0 | 455.6 | 480.1 |
| OTHER | 8405.3 | 6690.5 | 5806.4 | 6639.8 | 7093.9 | 4954.1 | 4301.4 | 3944.1 |
| TOTAL | 21203.4 | 20883.4 | 22269.5 | 26750.3 | 31946.3 | 29520.0 | 27248.5 | 27196.8 |



TABLE 14. SUMMARY OF NOX EMISSIONS (1000 TONS) BY SOURCE CATEGORY FOR THE U.S.

| SOURCE CATEGORY | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| ELECTRIC UTILITIES | 1312.3 | 1942.6 | 2579.5 | 3469.5 | 5108.5 | 6257.2 | 6742.0 | 7923.6 |
| INDUSTRIAL | 2778.1 | 3298.0 | 3230.5 | 3651.0 | 1726.5 | 1364.4 | 1554.5 | 1550.8 |
| COMMERCIAL - RESIDENTIAL | 426.3 | 363.0 | 687.7 | 711.1 | 830.7 | 747.9 | 768.7 | 712.6 |
| PIPELINES | 156.9 | 320.1 | 1152.7 | 1615.5 | 2632.5 | 2445.1 | 2700.9 | 2037.6 |
| HIGHWAY VEHICLES | 2285.5 | 2894.8 | 3468.9 | 4411.9 | 6206.3 | 7352.7 | 8054.6 | 7655.8 |
| OTHER | 3349.5 | 2744.3 | 2490.7 | 2720.2 | 2898.0 | 2333.6 | 2593.1 | 2378.3 |
| TOTAL | 10308.6 | 11562.8 | 13610.1 | 16579.2 | 19402.5 | 20500.9 | 22413.9 | 22258.8 |

SECTION 6.0

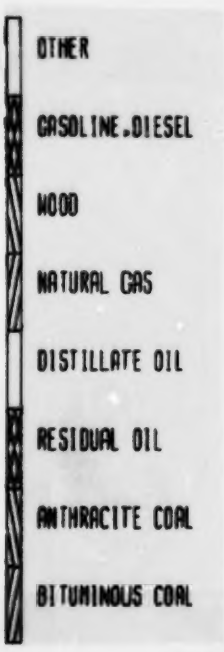
PLOT OF STATE EMISSION TRENDS

Note: This section graphically displays the emission trends of $SO_2$ and $NO_x$ by fuel type and by source category. The graphs show the trend for major categories or for groups of categories labelled as "other". The categories included under "other" are identified below.

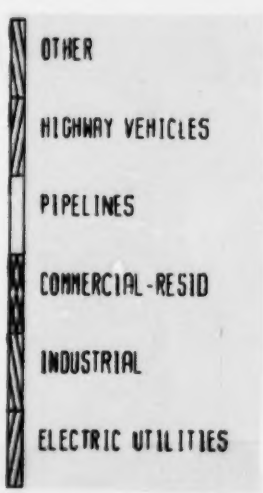
Other Categories

| Time Period | Trends by Fuel Type | Trends by Source Categories |
|---|---|---|
| 1900-1945 | Smelters, wildfires miscellaneous. | Railroads, anthracite coal, vessels, wood, smelters, wildfires, miscellaneous. |
| 1950-1980 | Smelters, wildfires miscellaneous. | Railroads, vessels, off-highway diesels, wildfires, smelters, miscellaneous. |

Legend for Graphs




Fuel Types




Source Categories

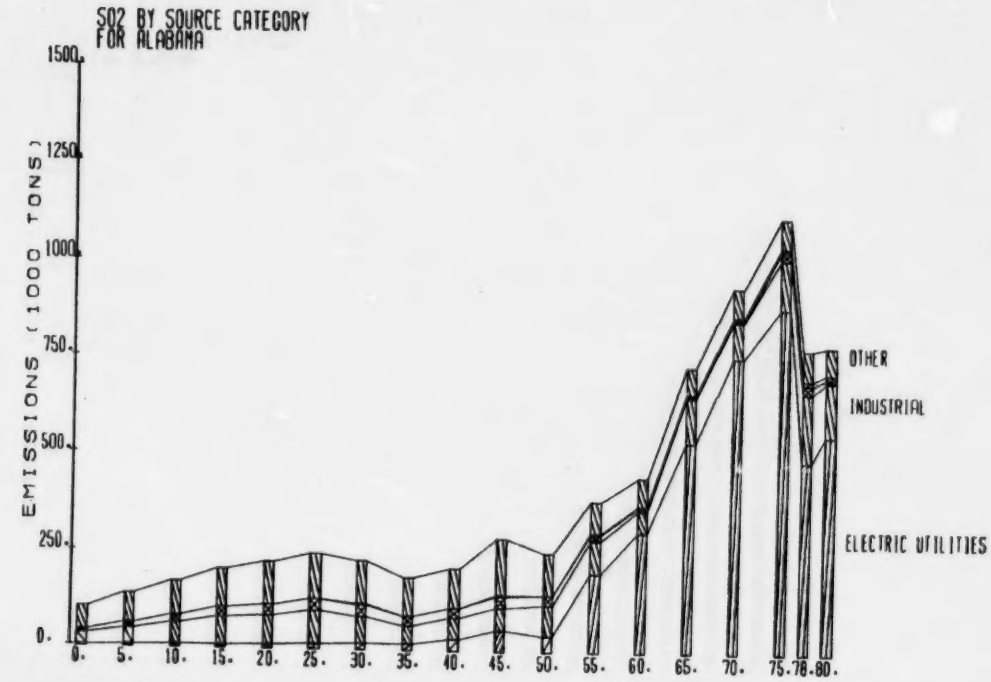



Figure 1.

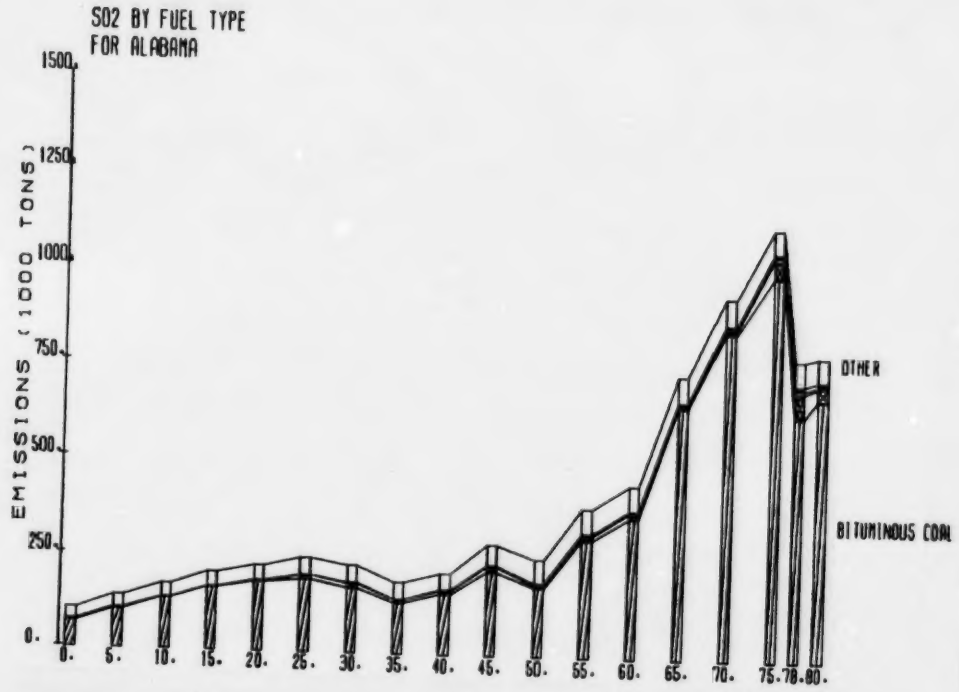



Figure 2.

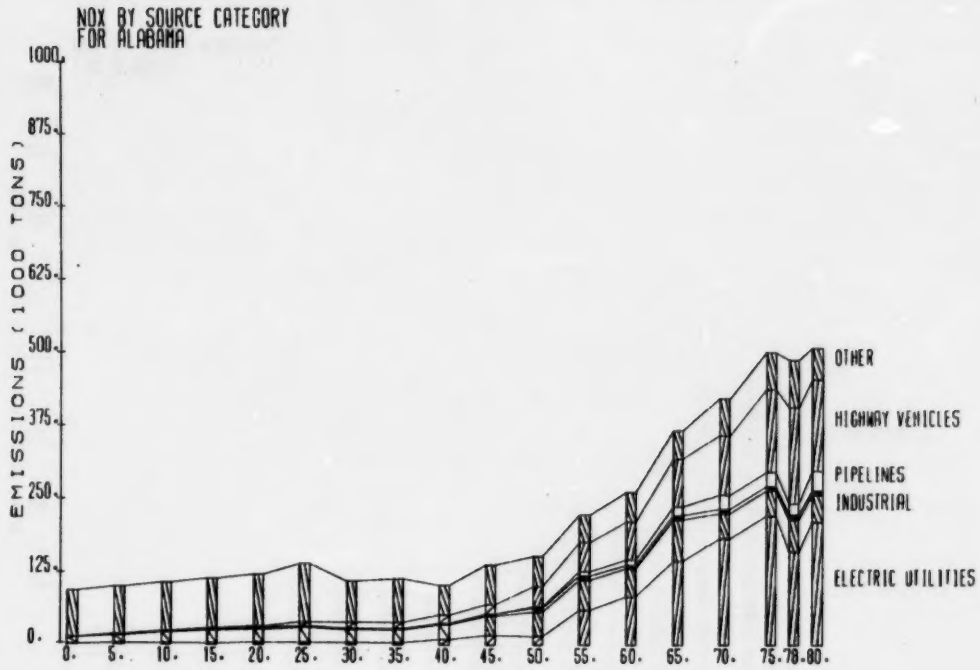



Figure 3.

Figure 4.

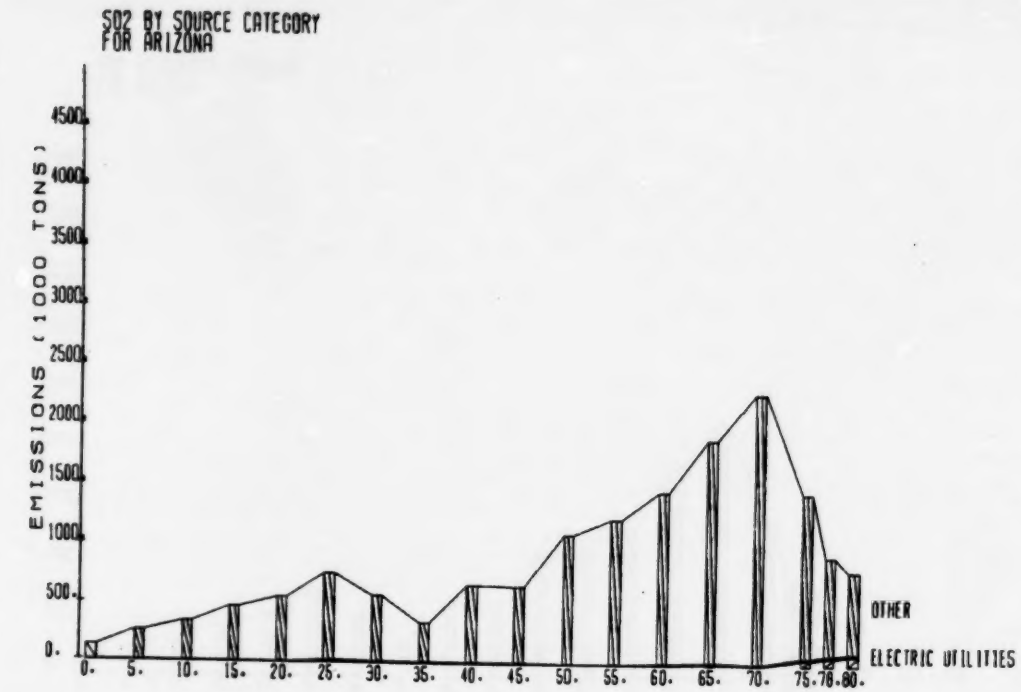



Figure 1.

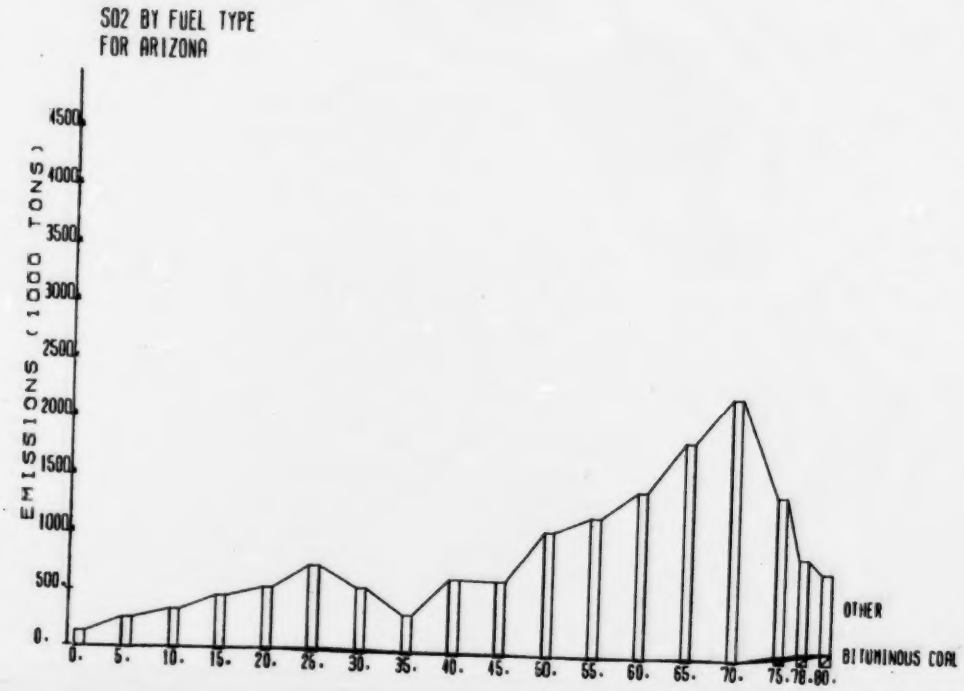



Figure 2.

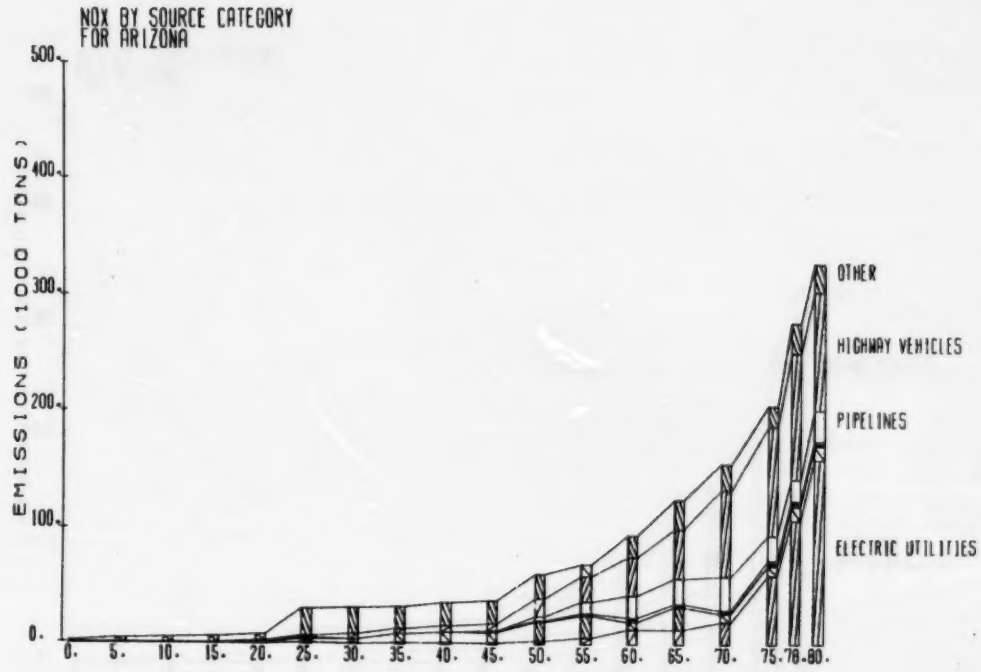



Figure 3.

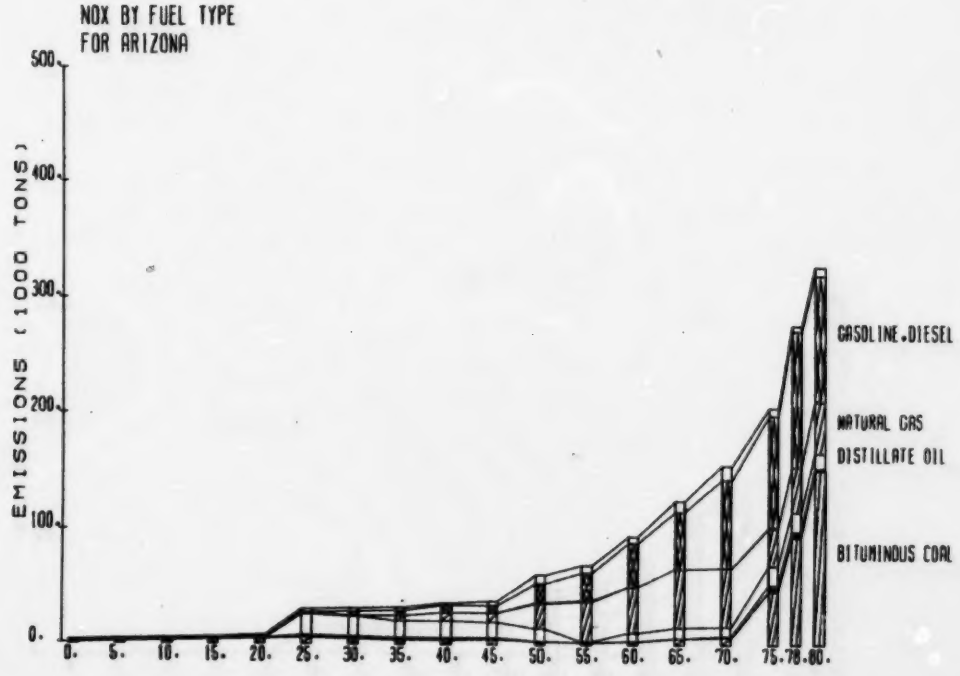



Figure 4.

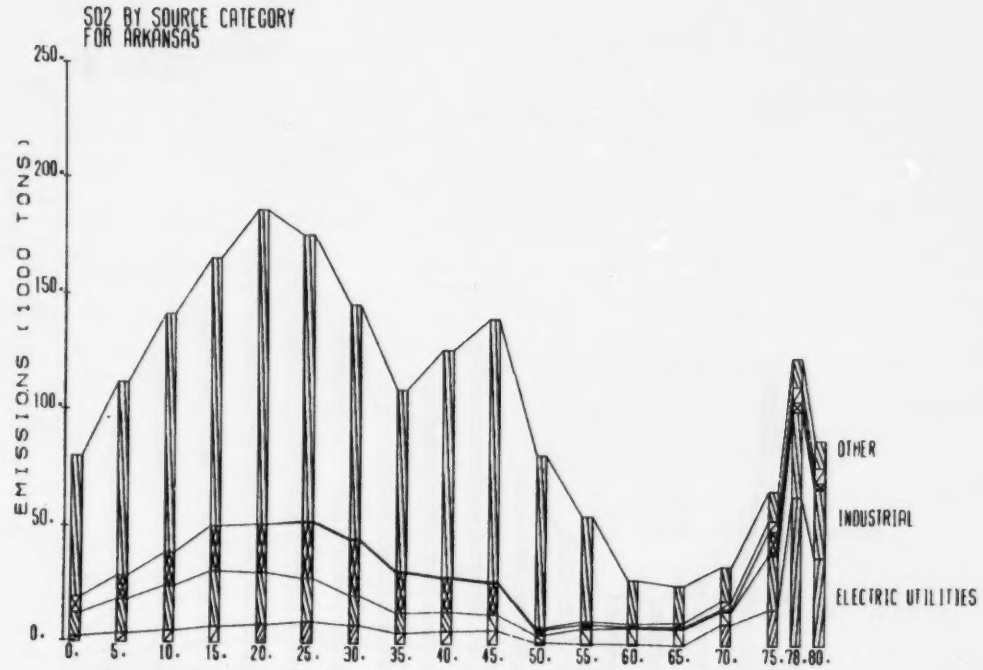



Figure 1.

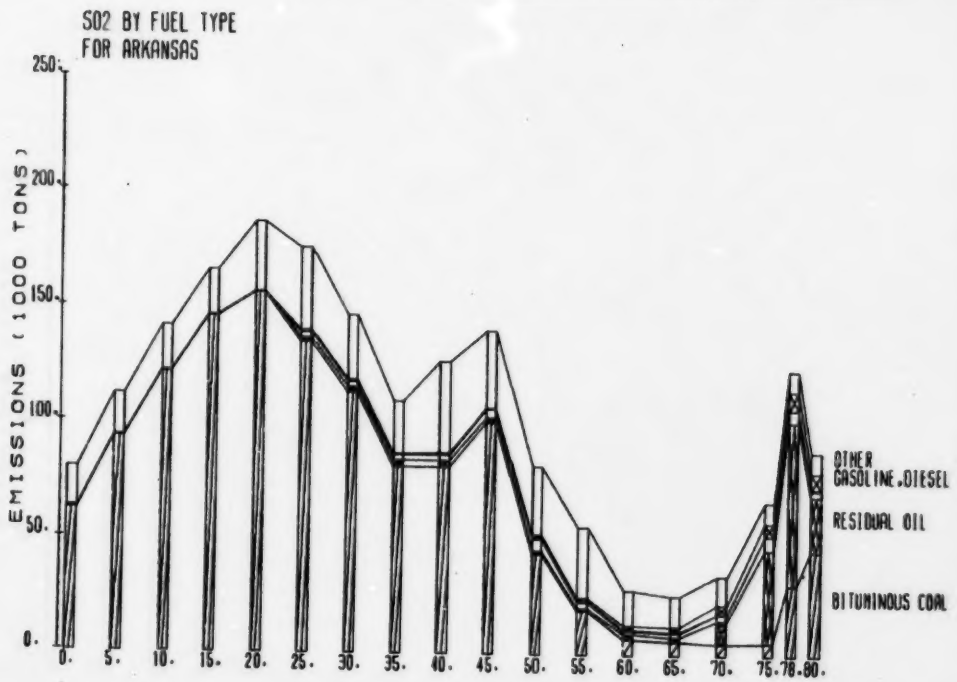



Figure 2.

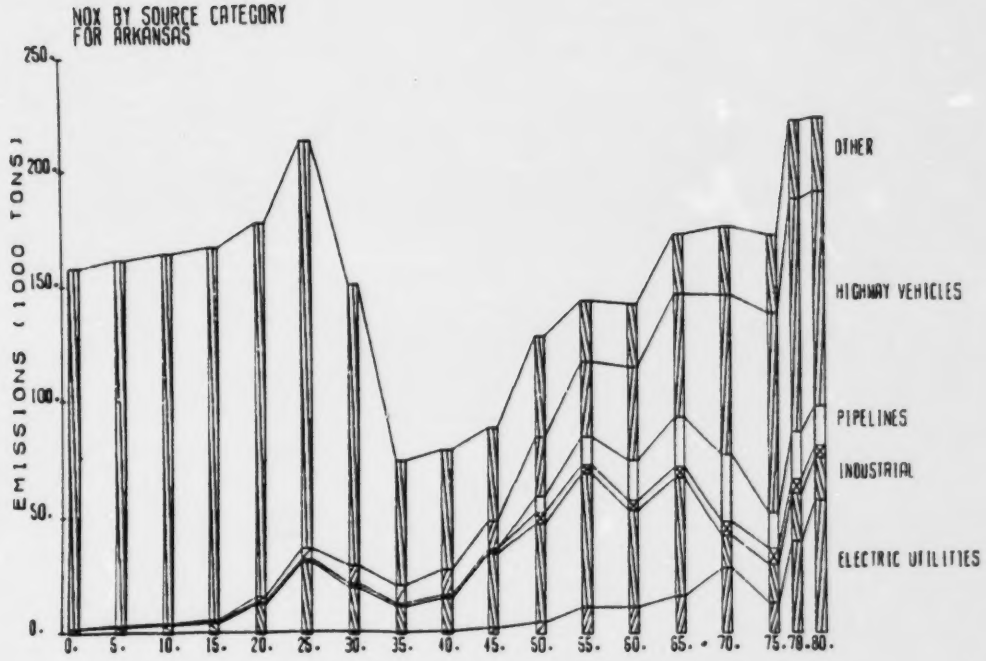



Figure 3.

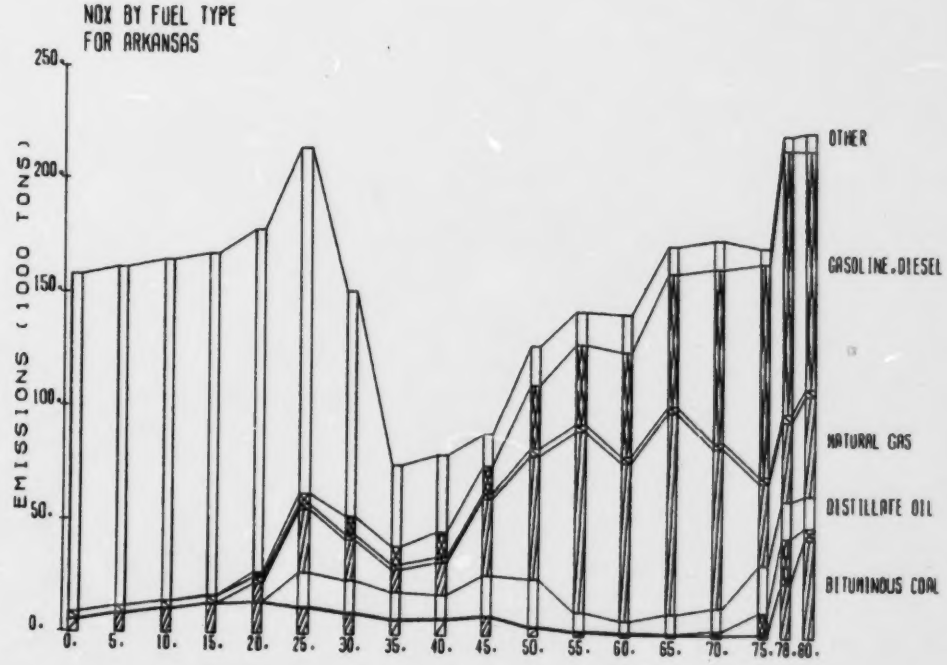



Figure 4.

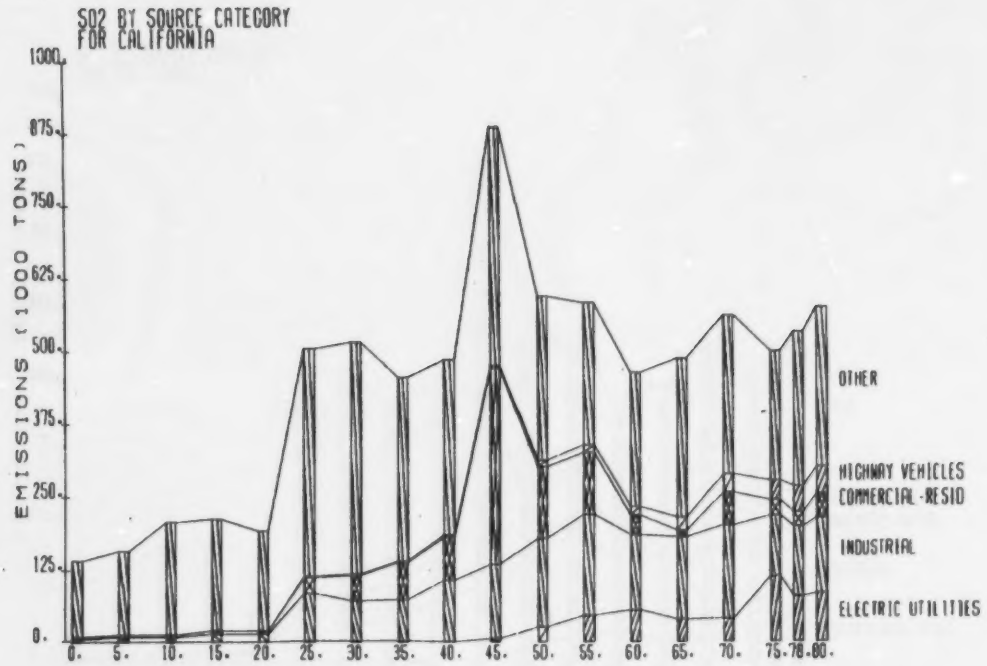



Figure 1.

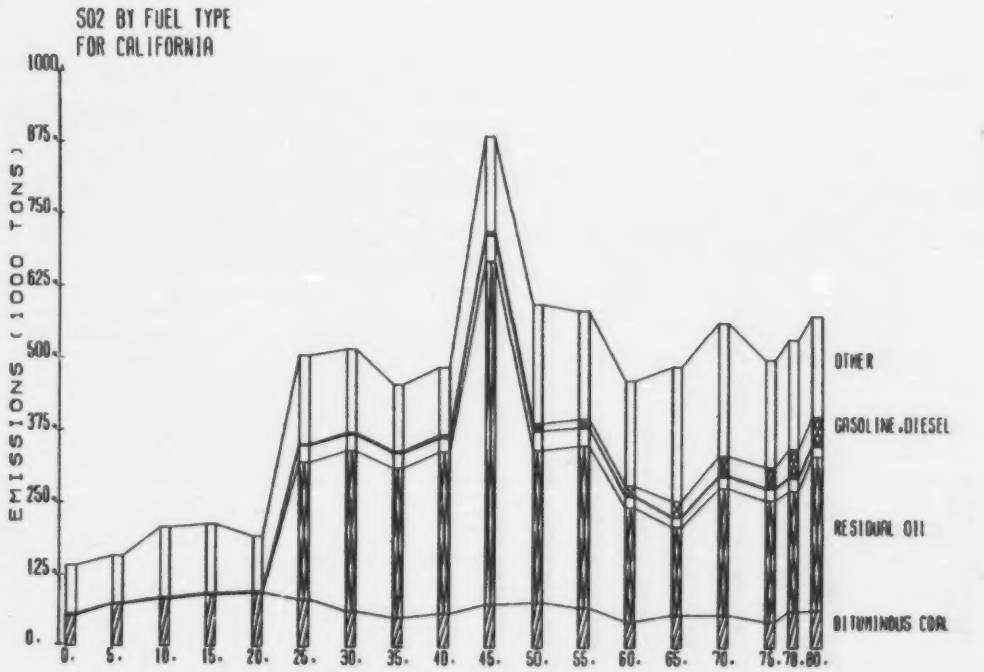



Figure 2.

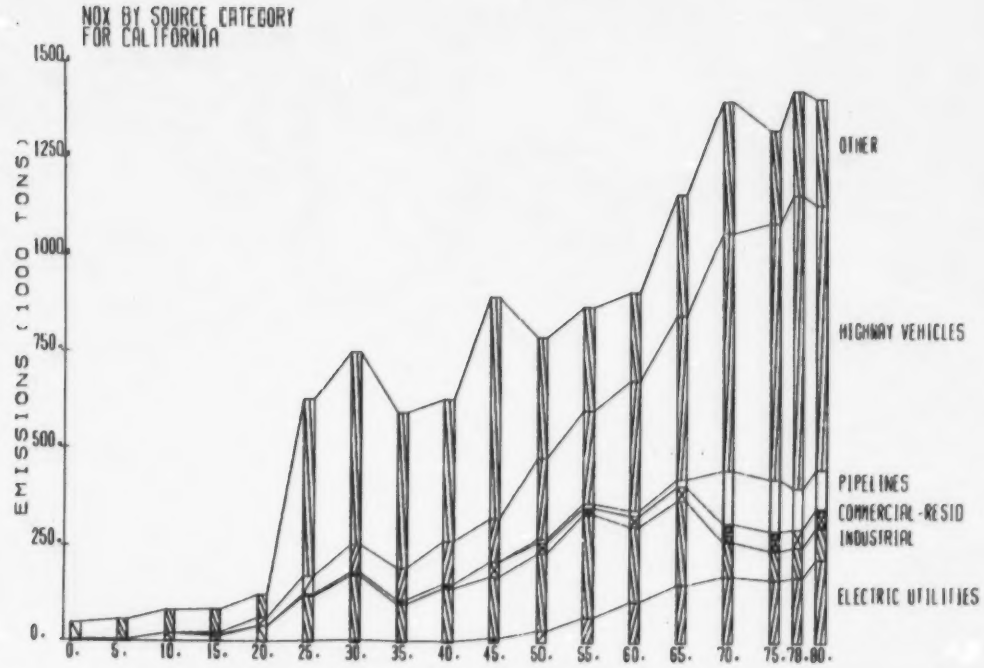



Figure 3.

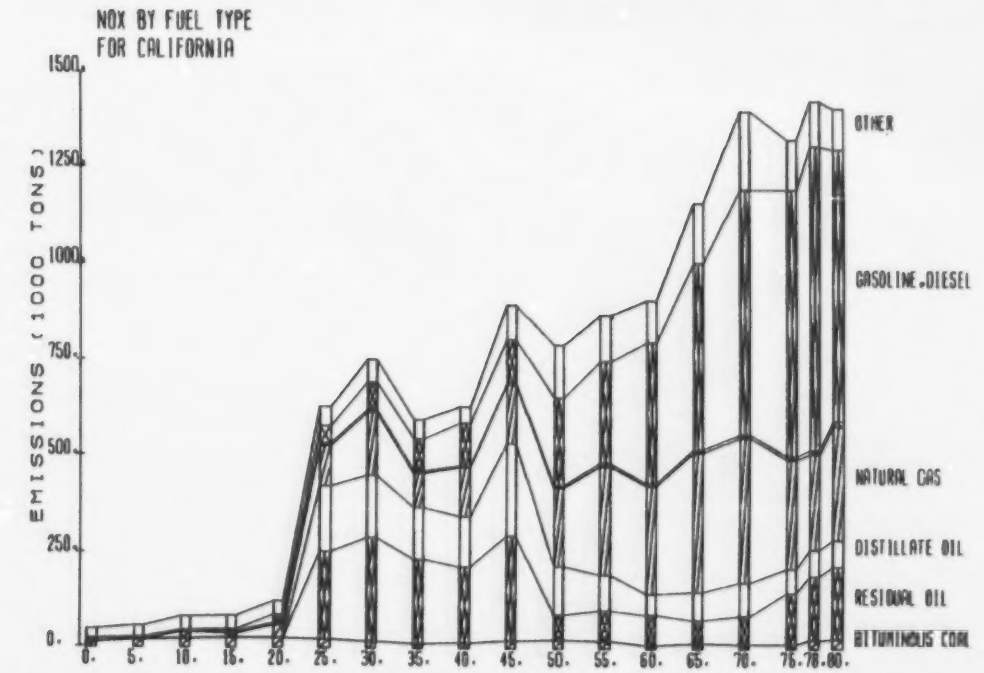



Figure 4.

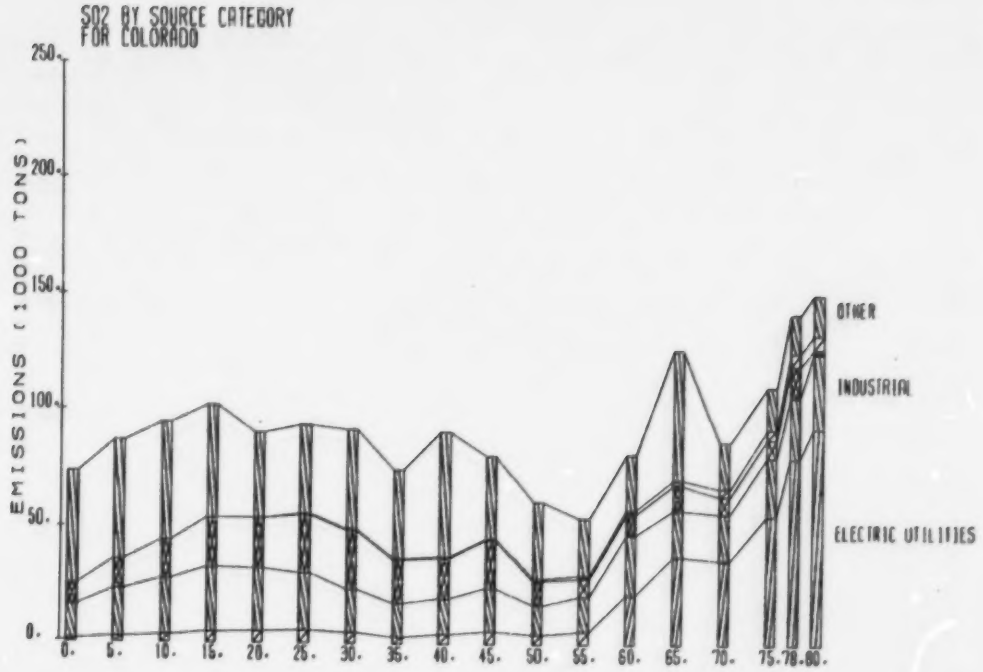
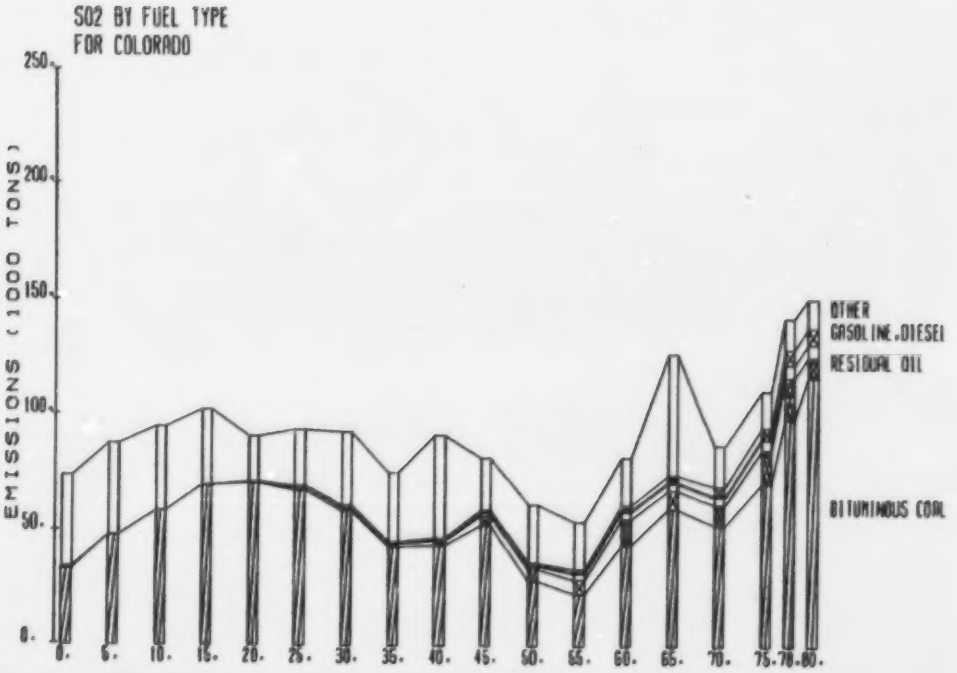



Figure 1.

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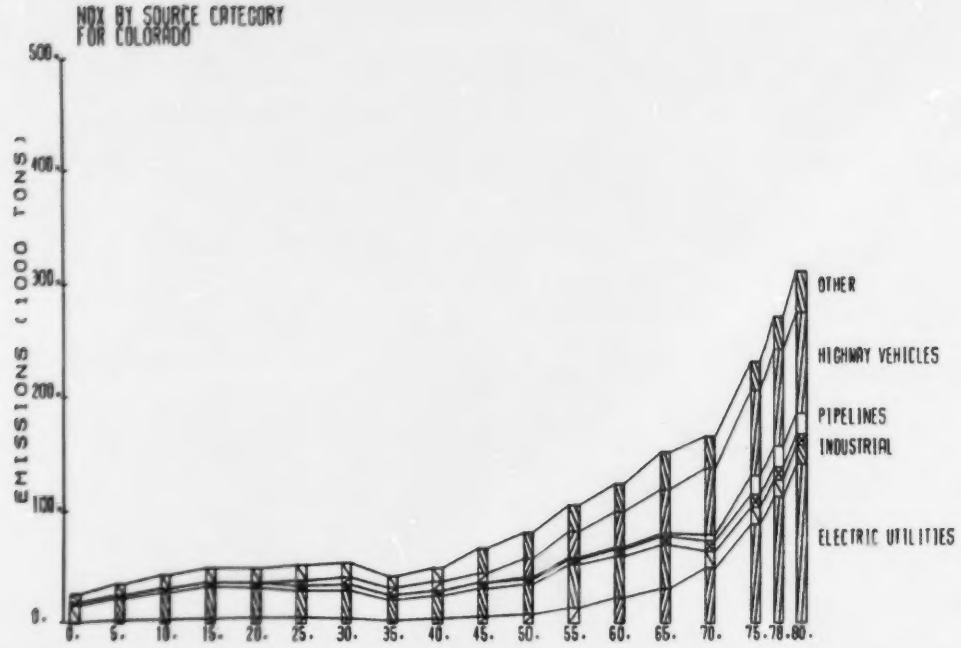


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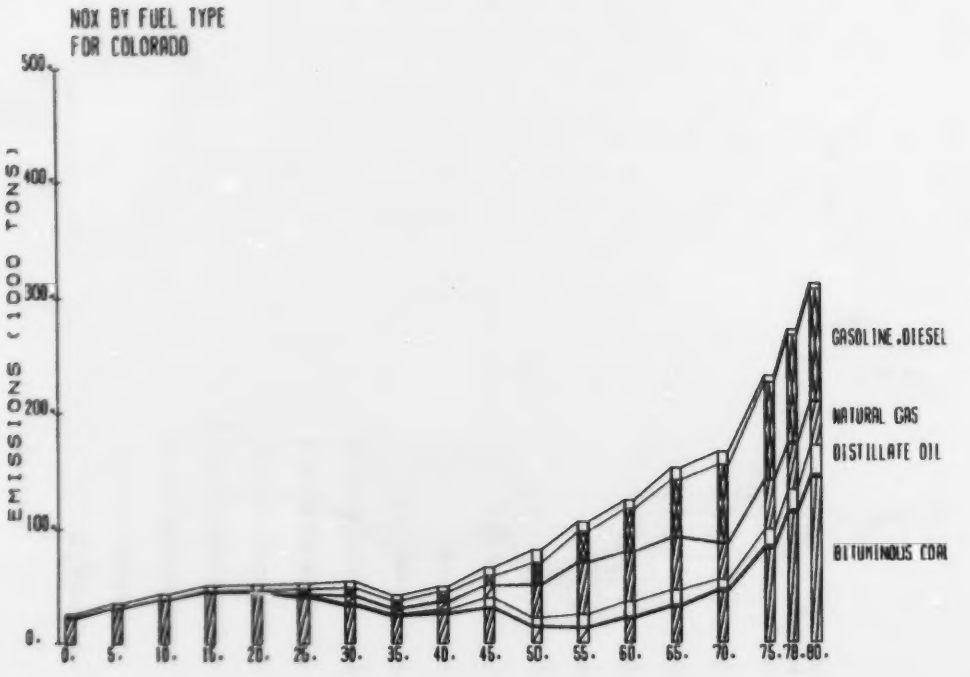


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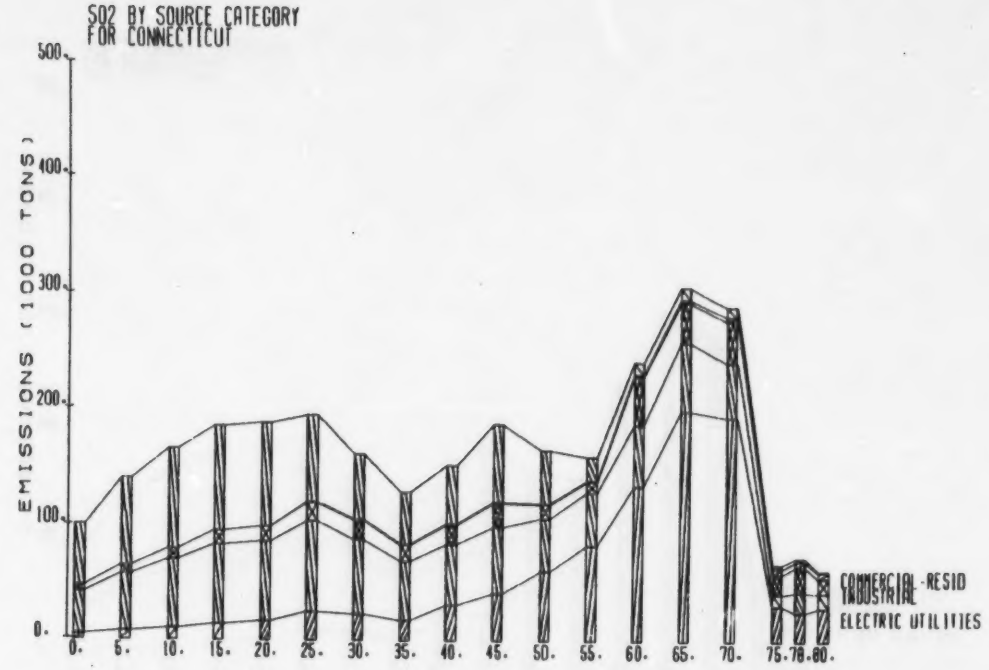


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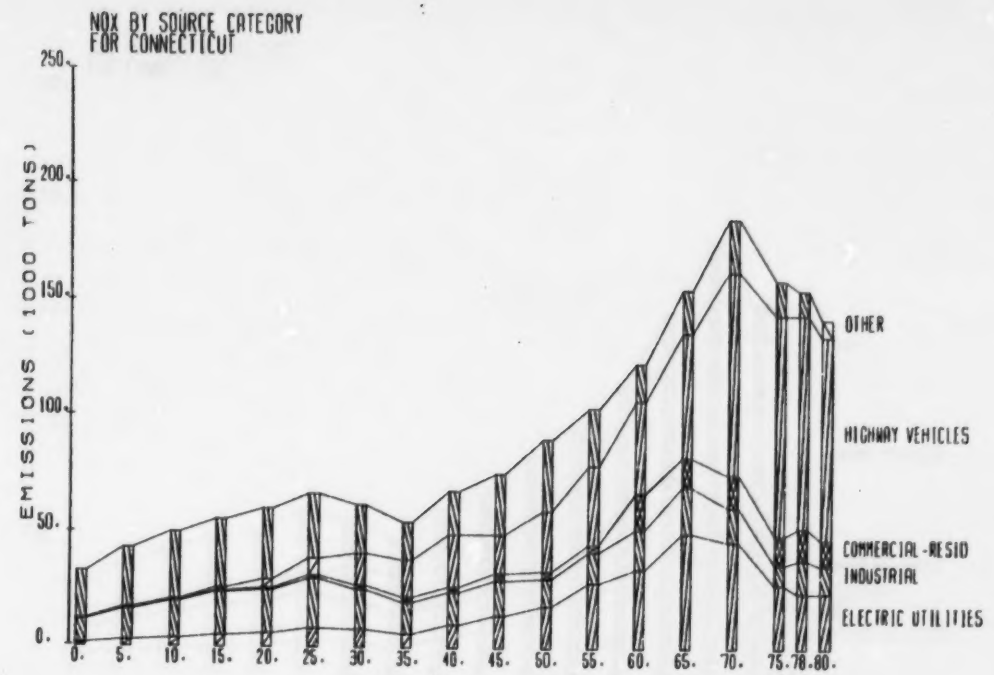


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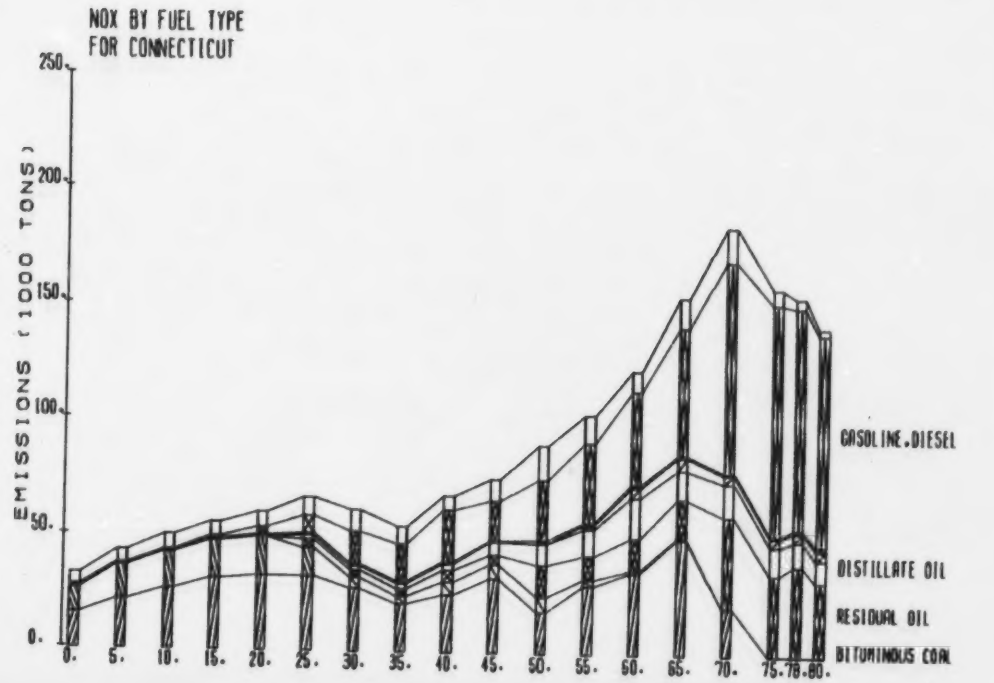


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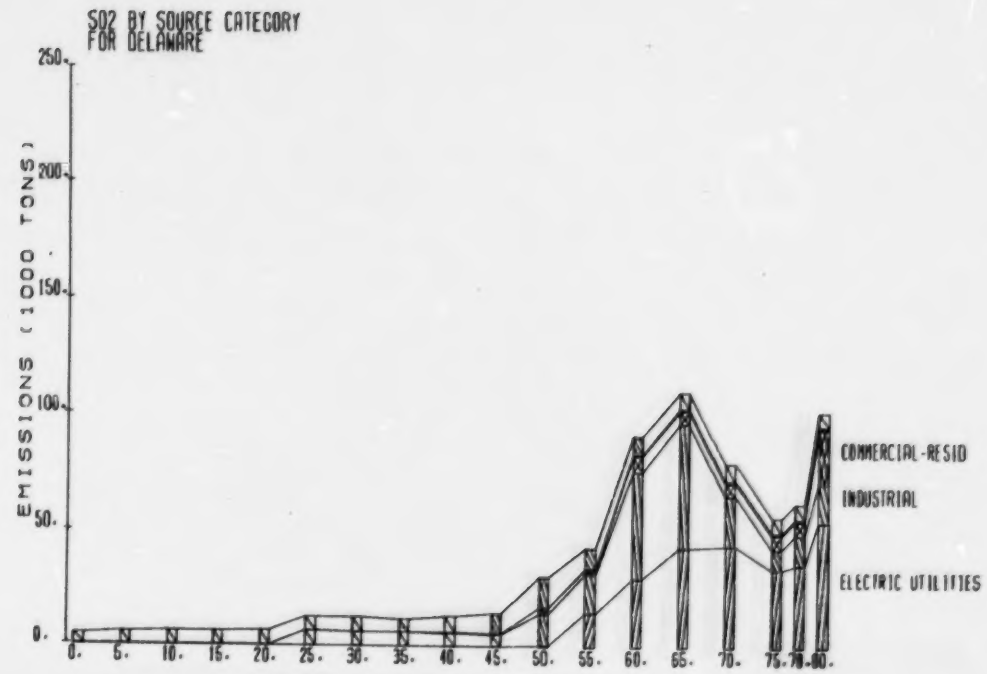


Figure 1.

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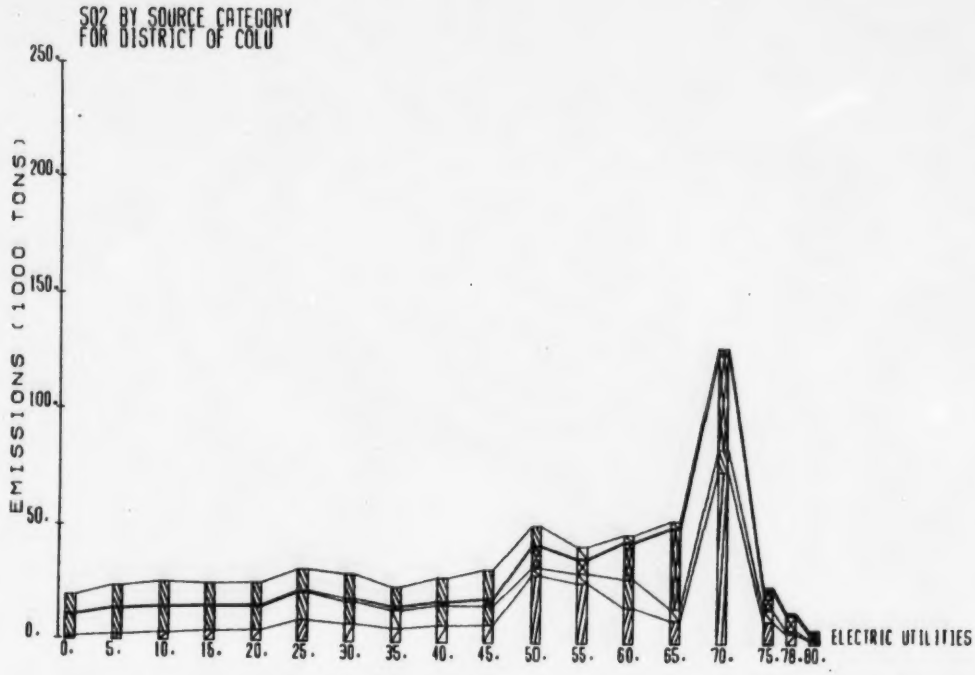
Figure 4.

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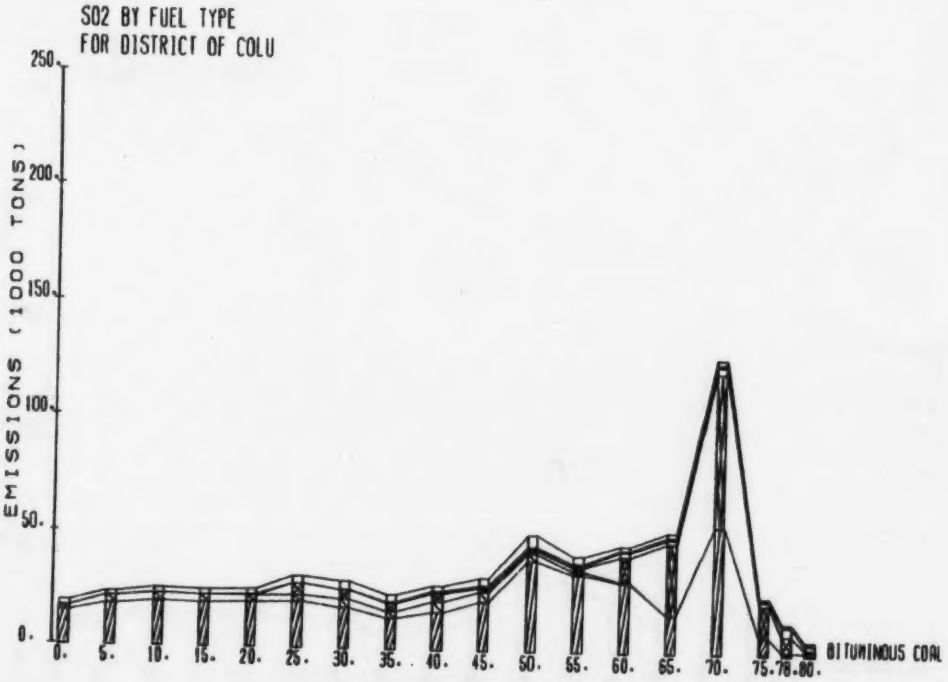


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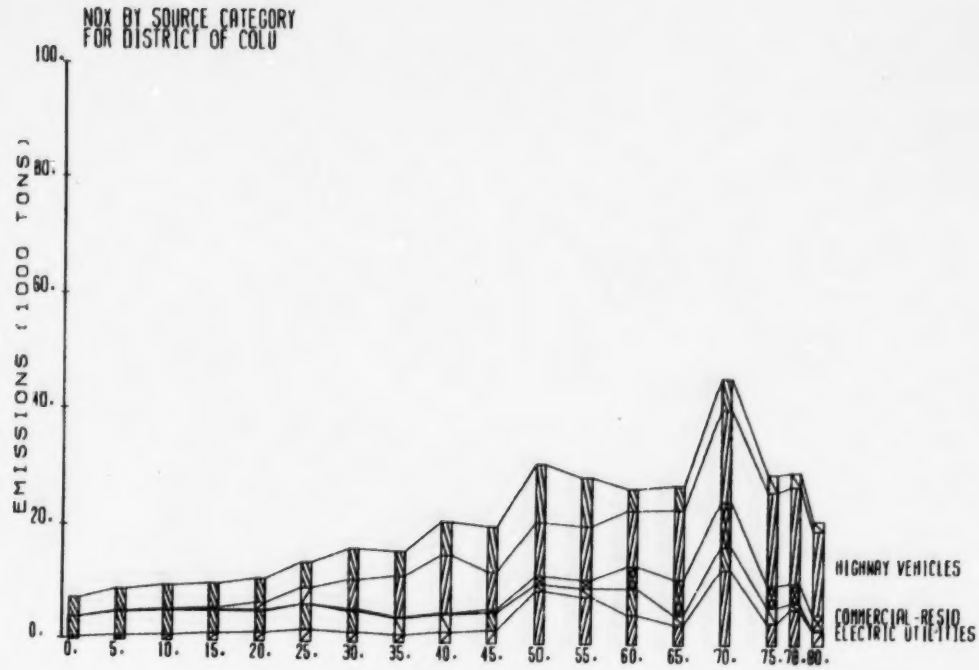


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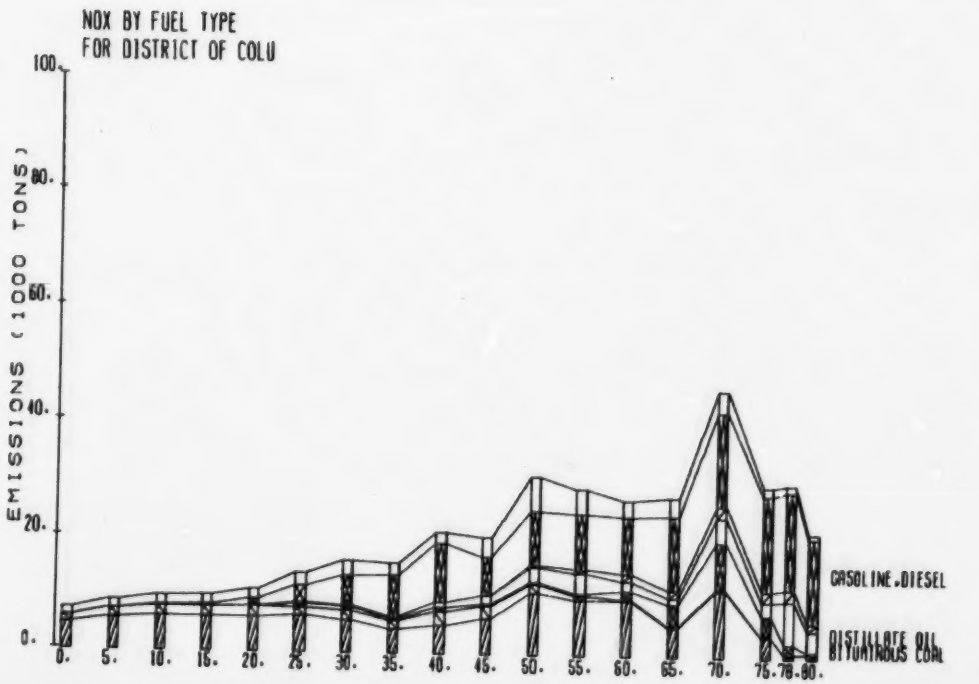


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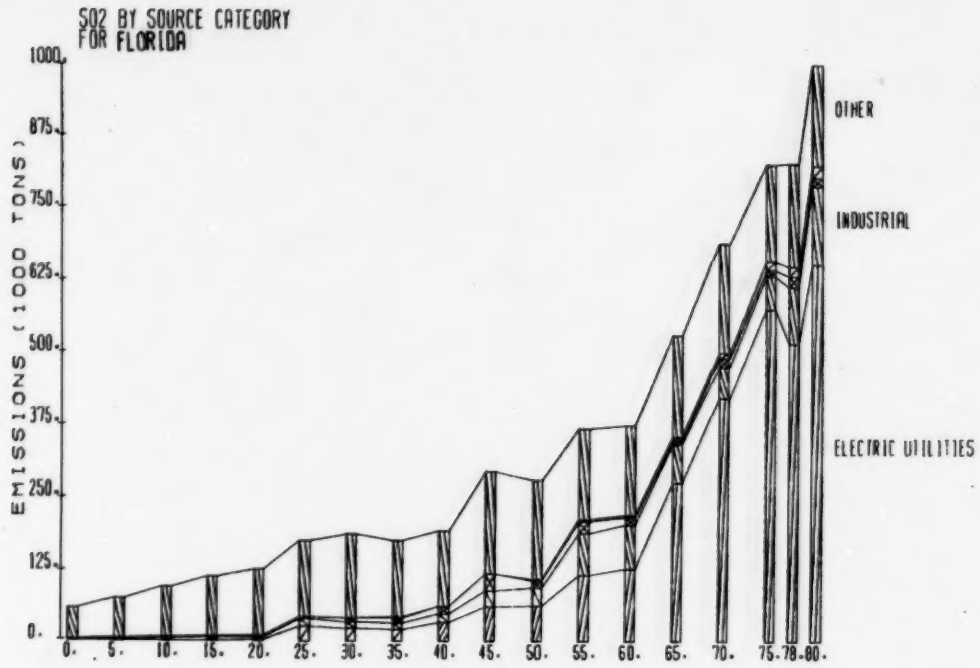


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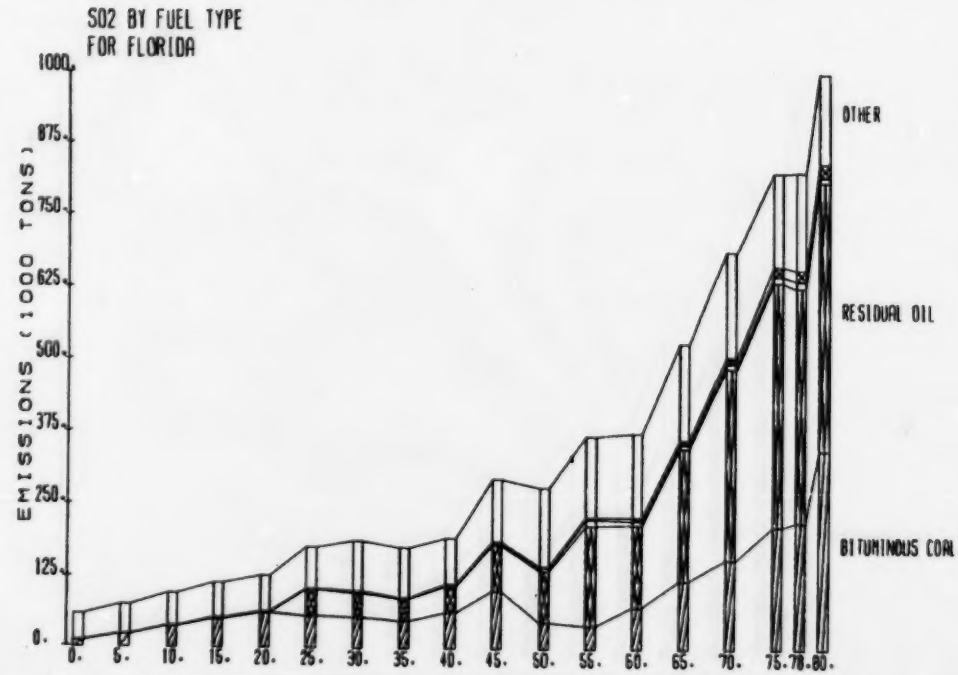


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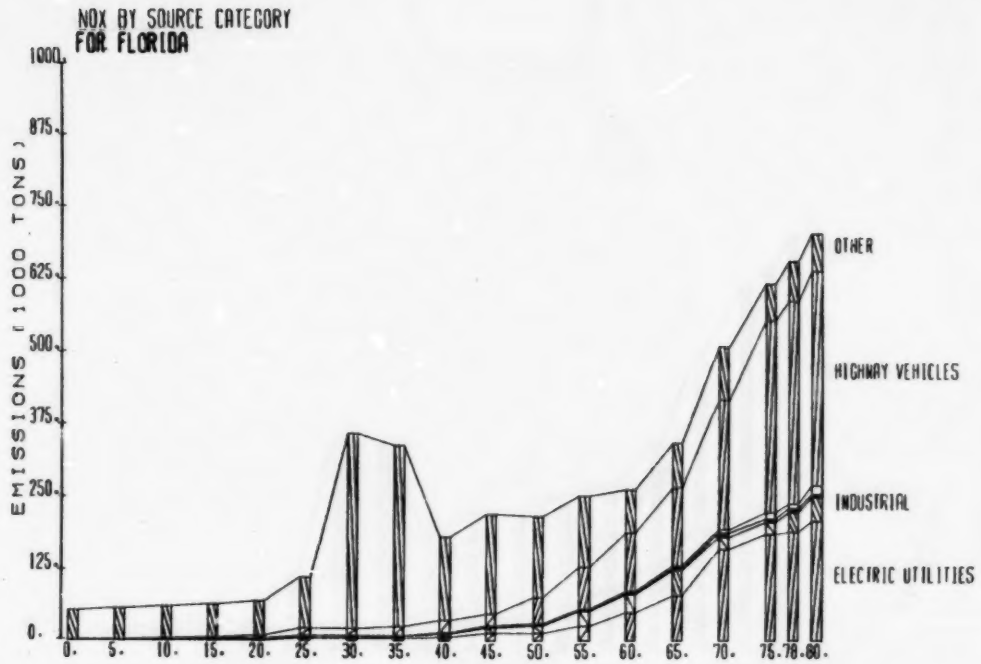


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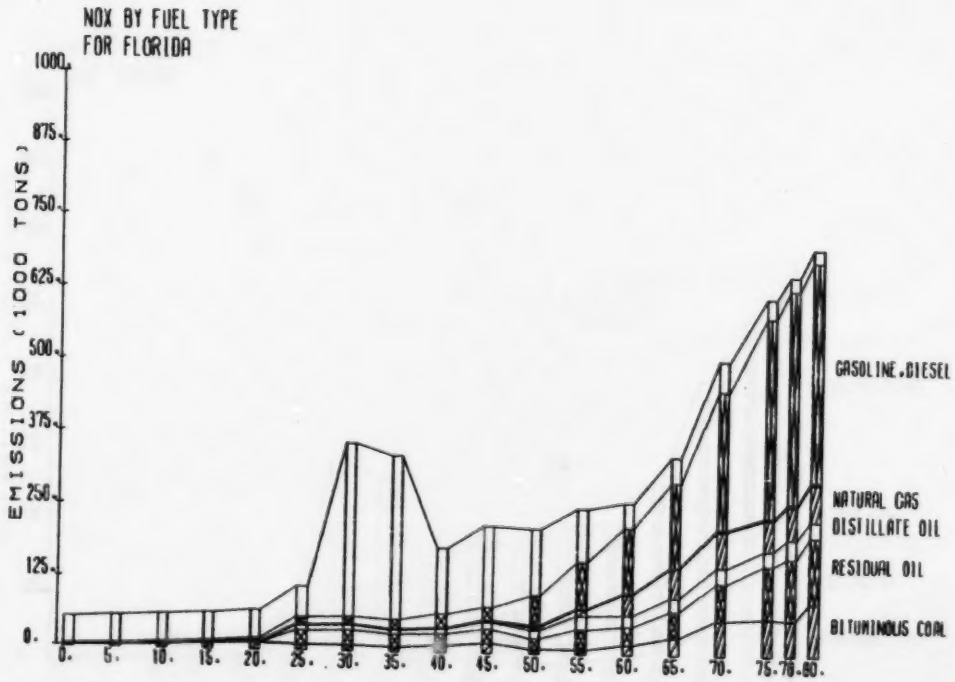


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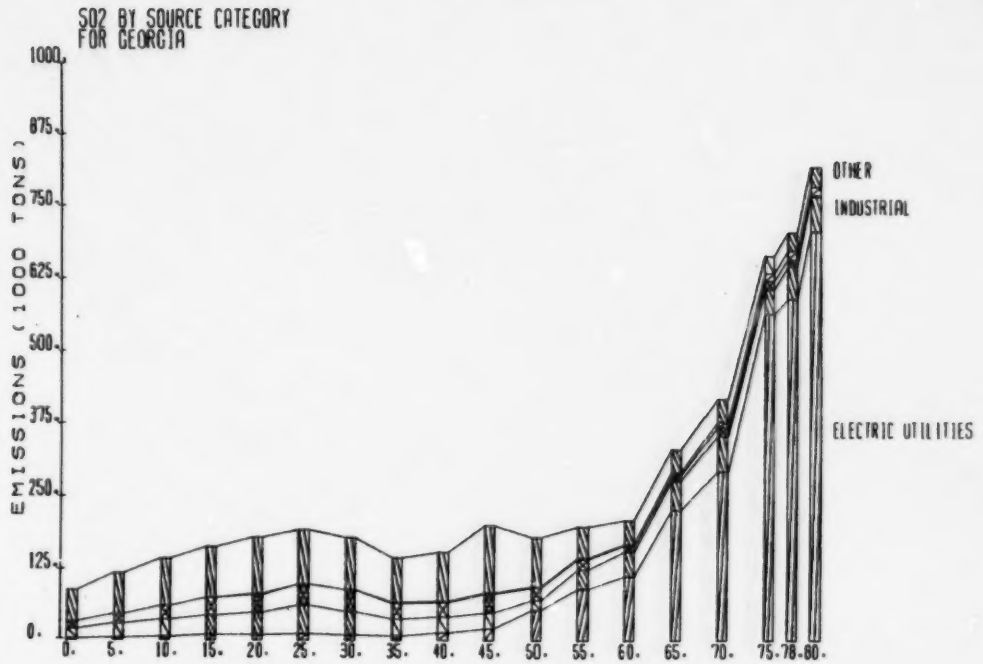


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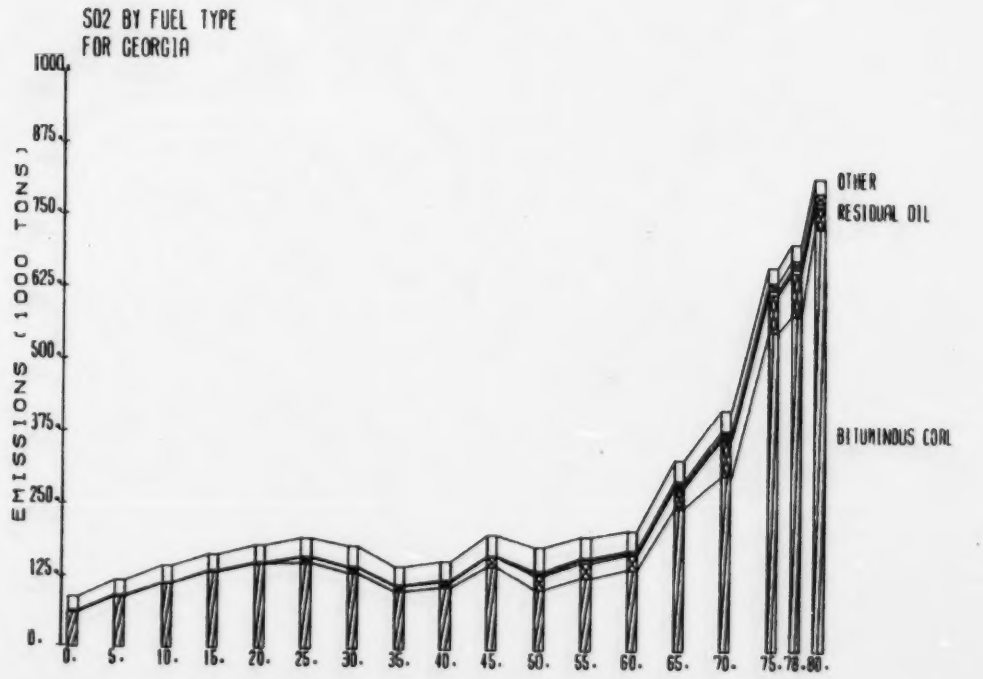


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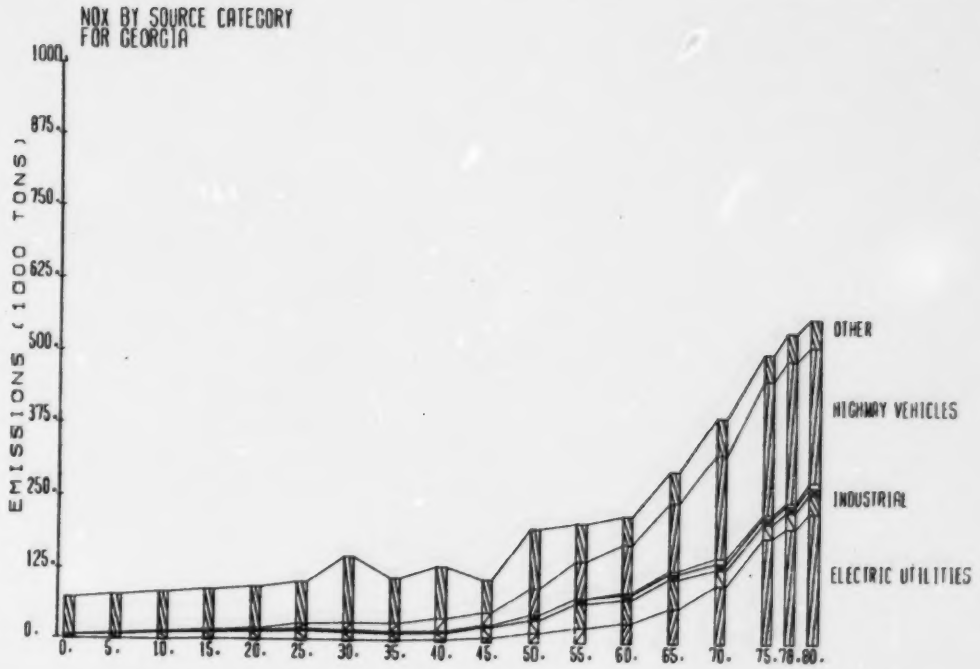


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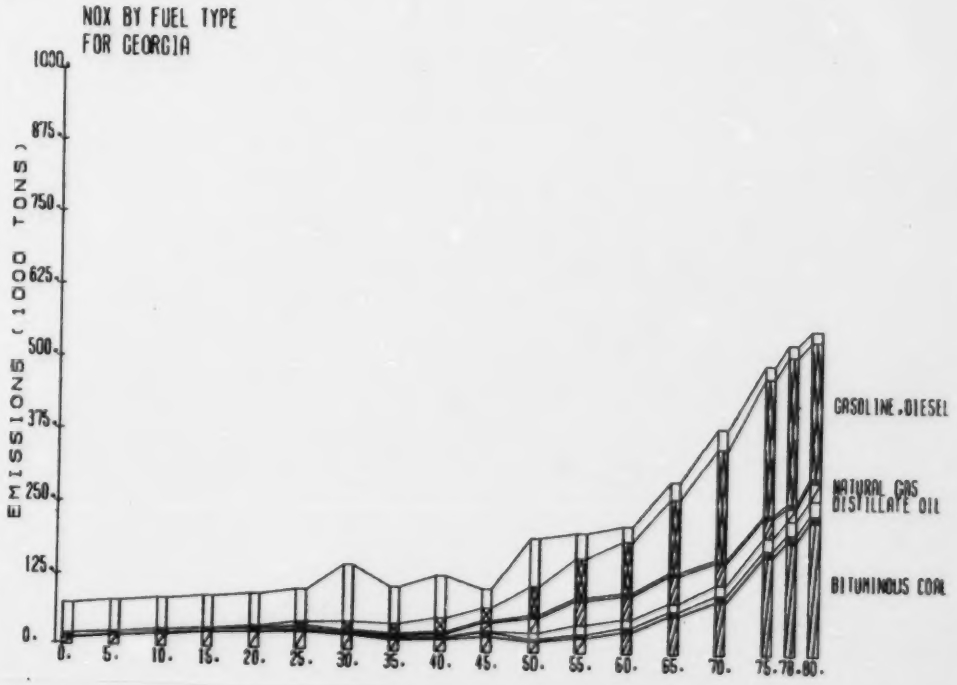


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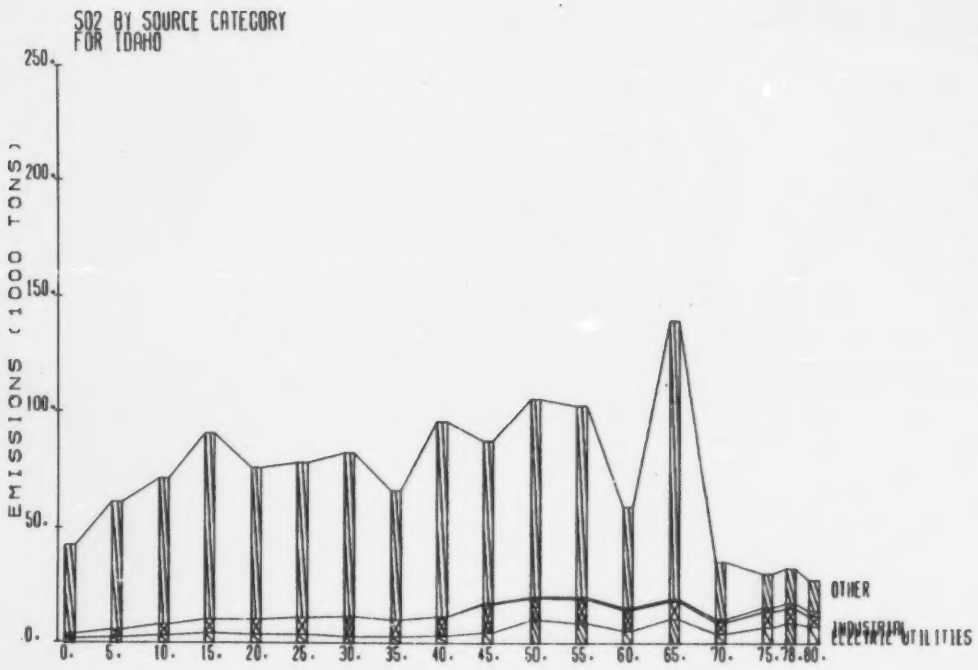


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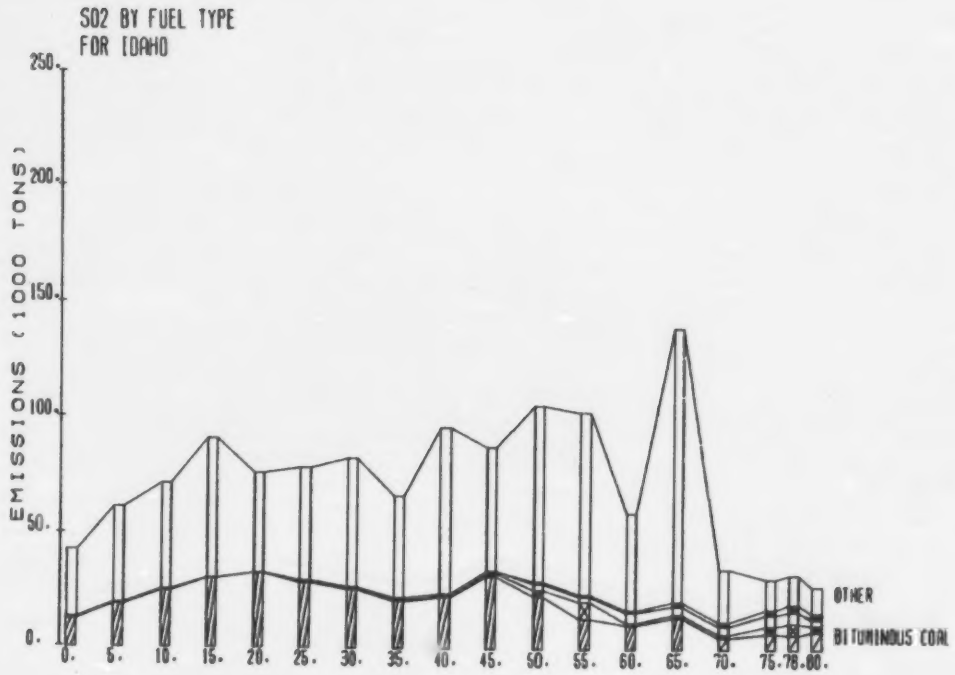


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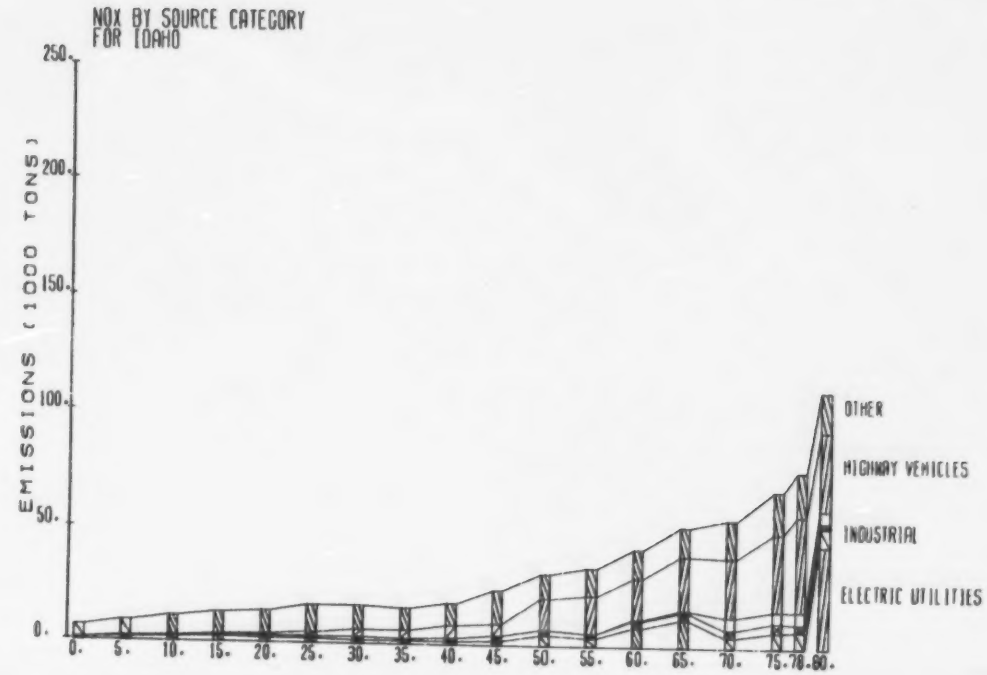
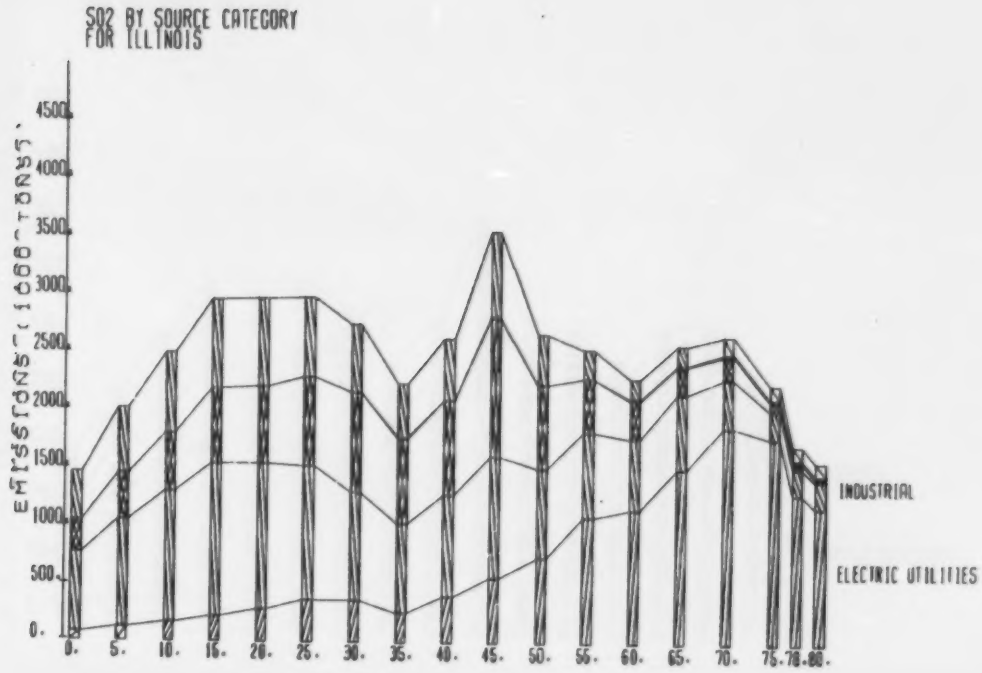



Figure 3.

Figure 4.

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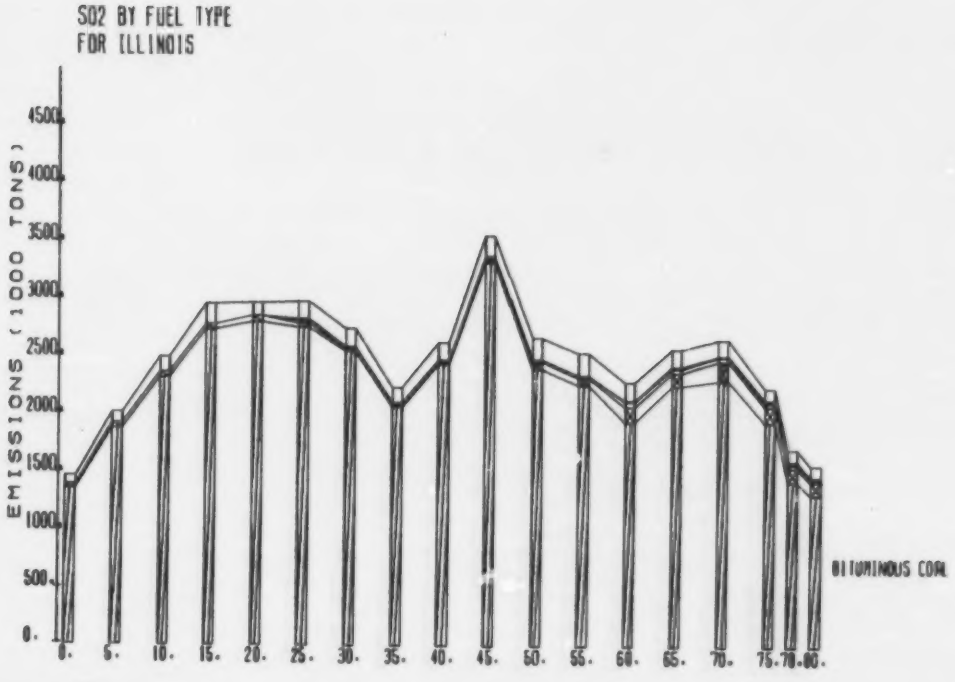


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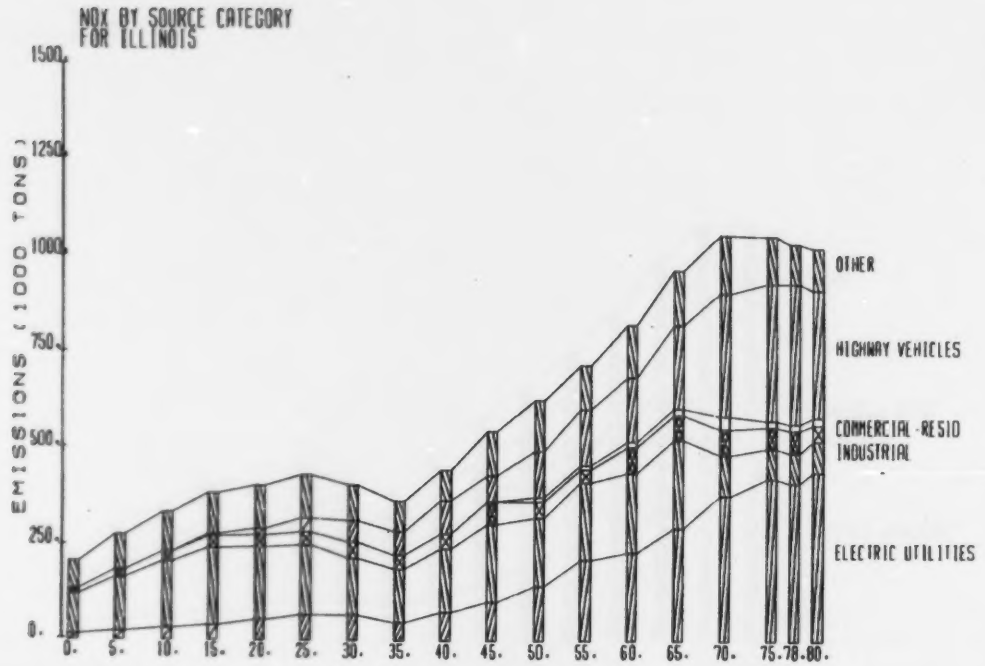


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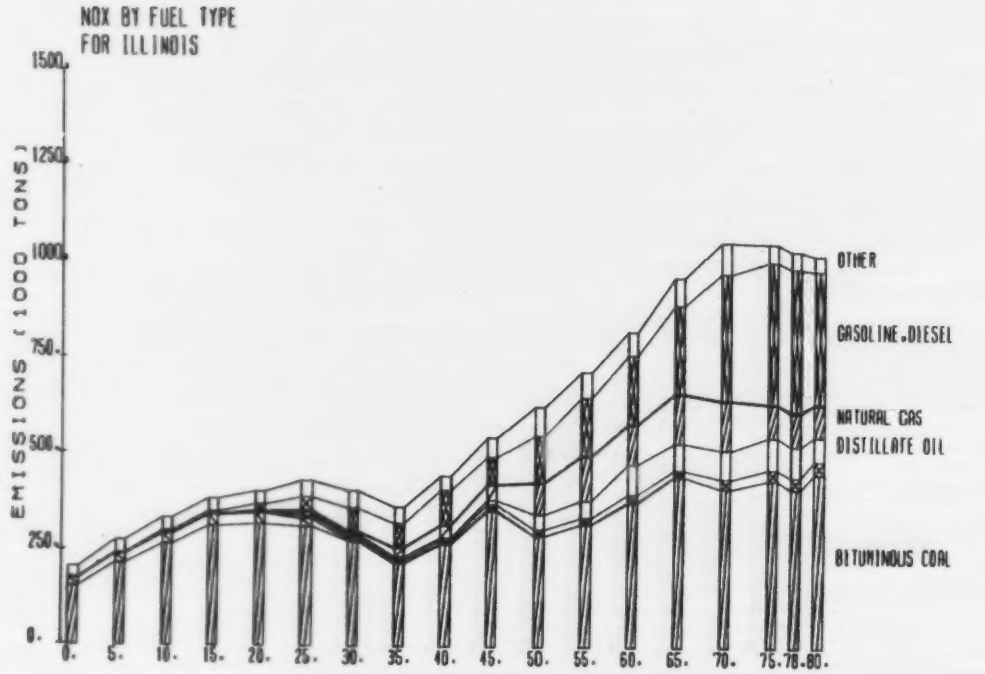


Figure 4.

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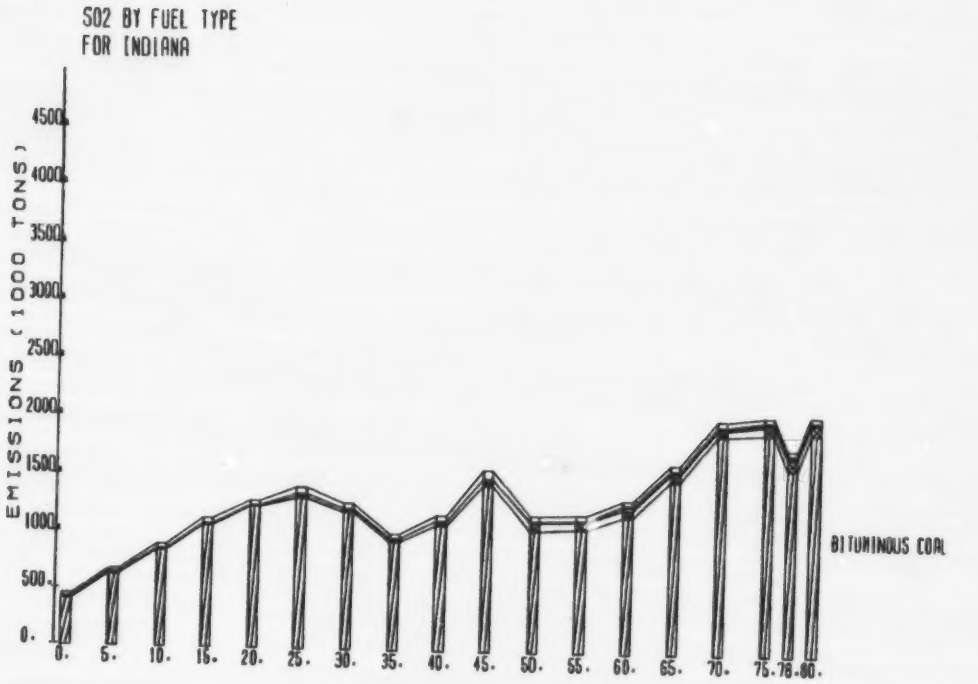


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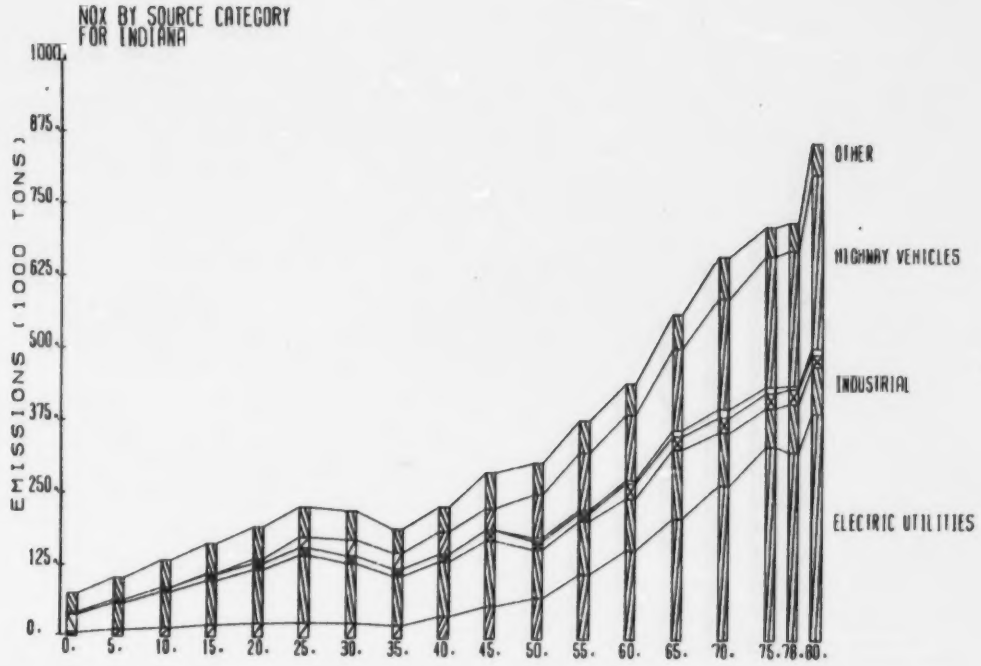


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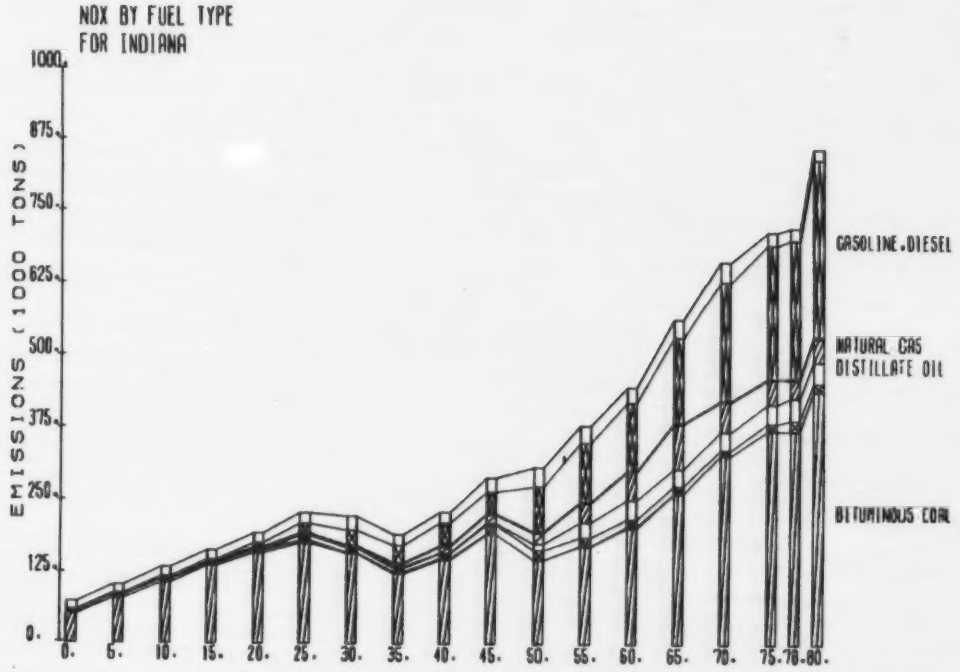


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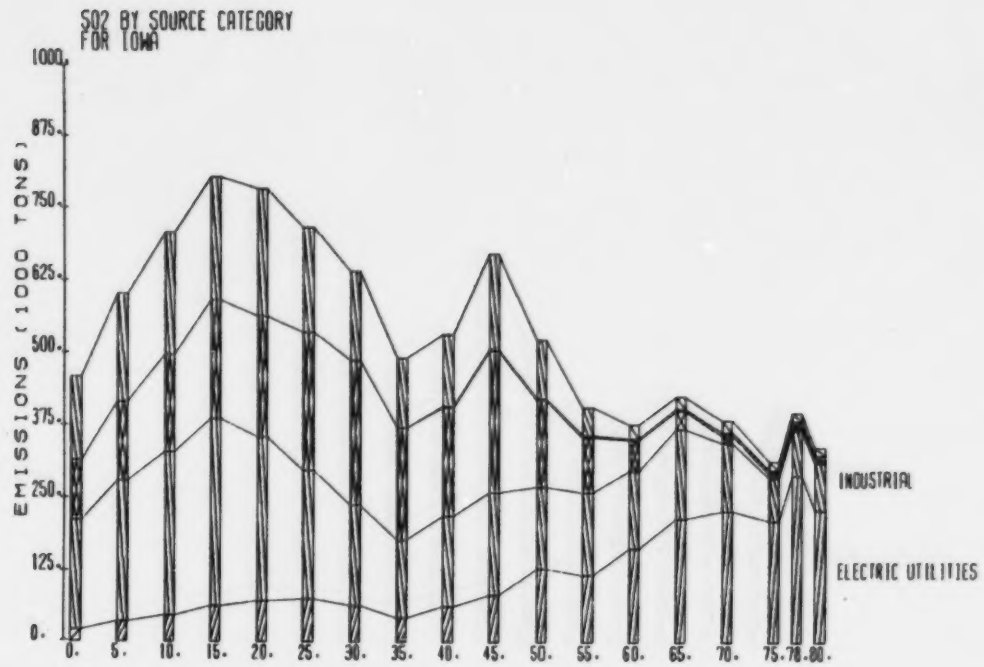


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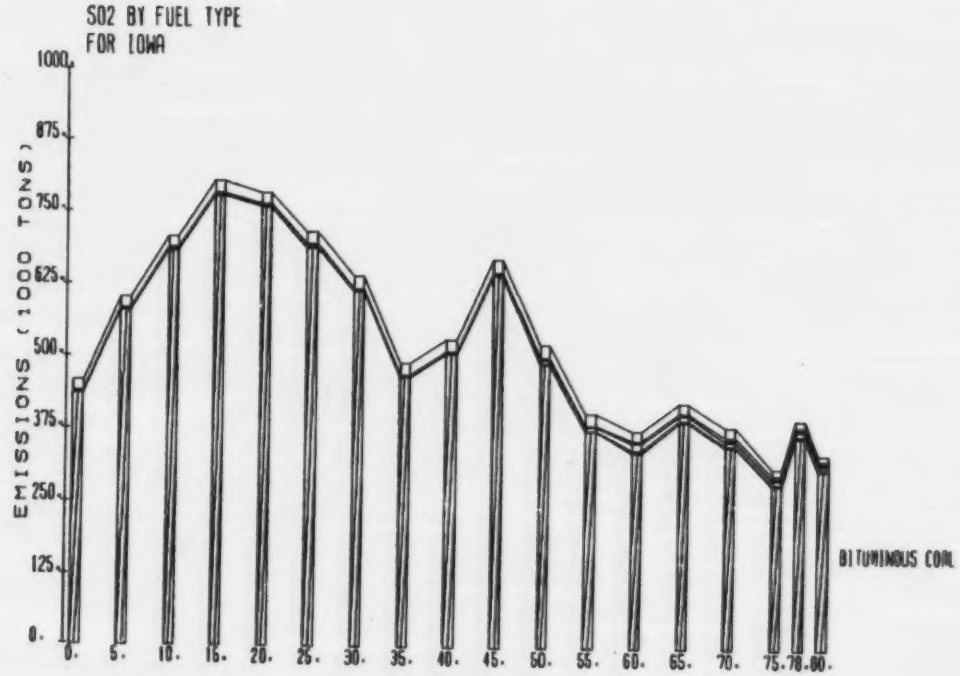


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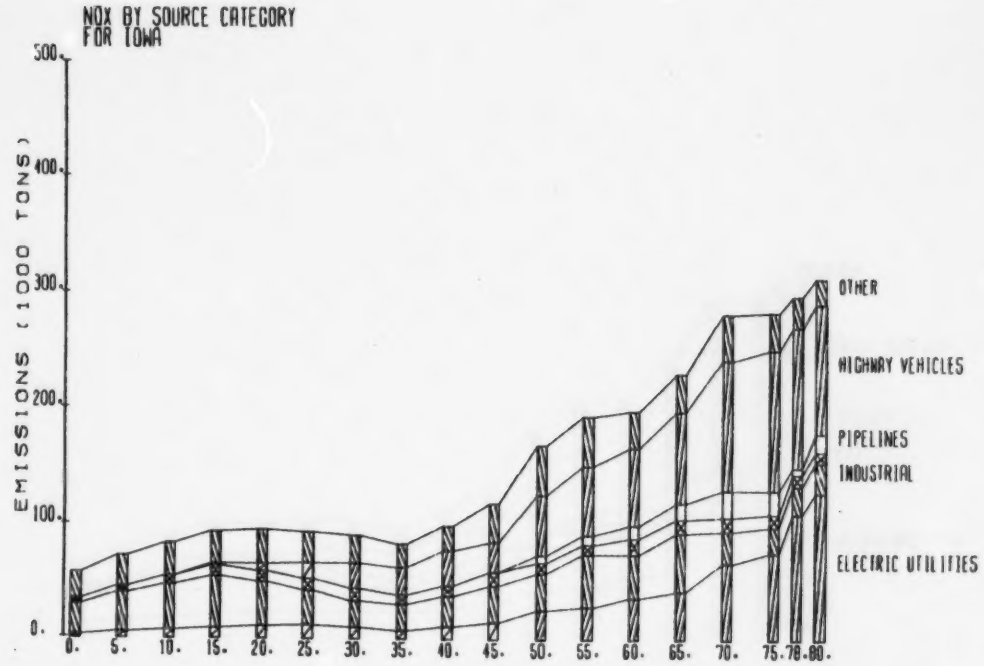


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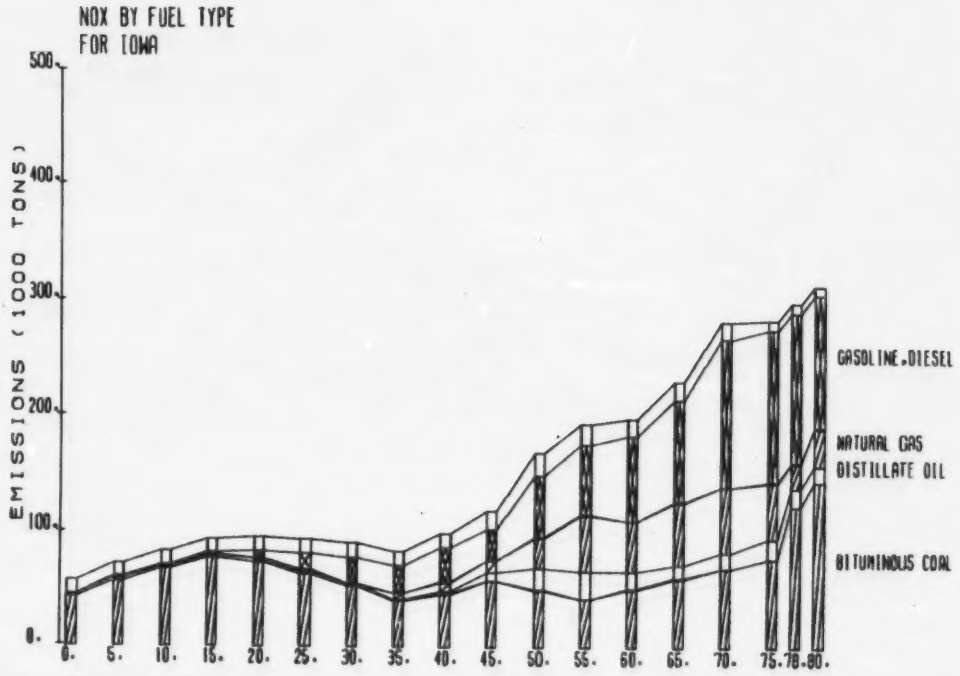


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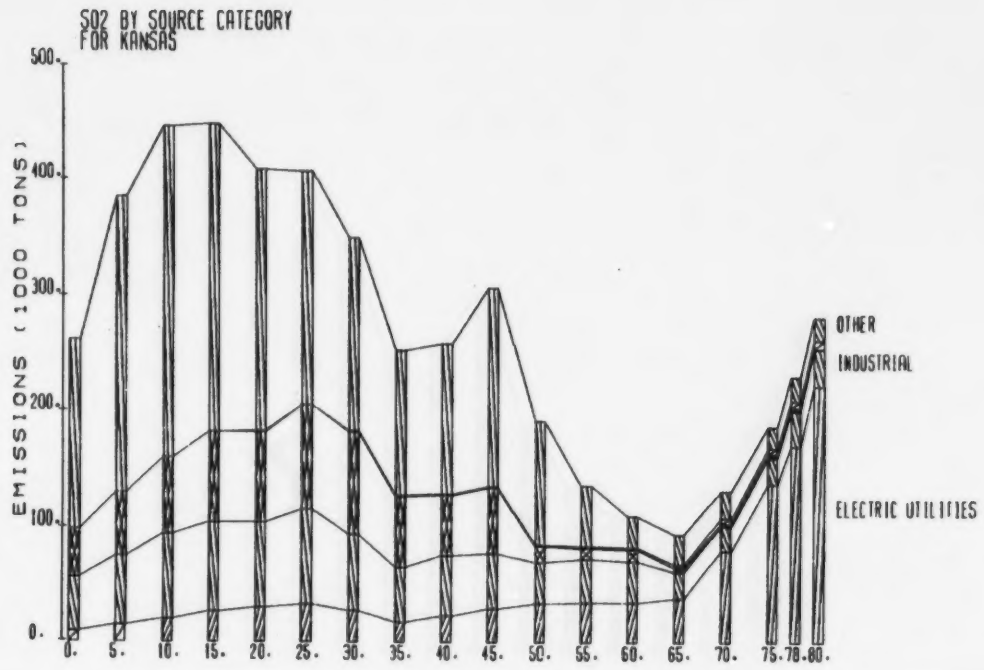


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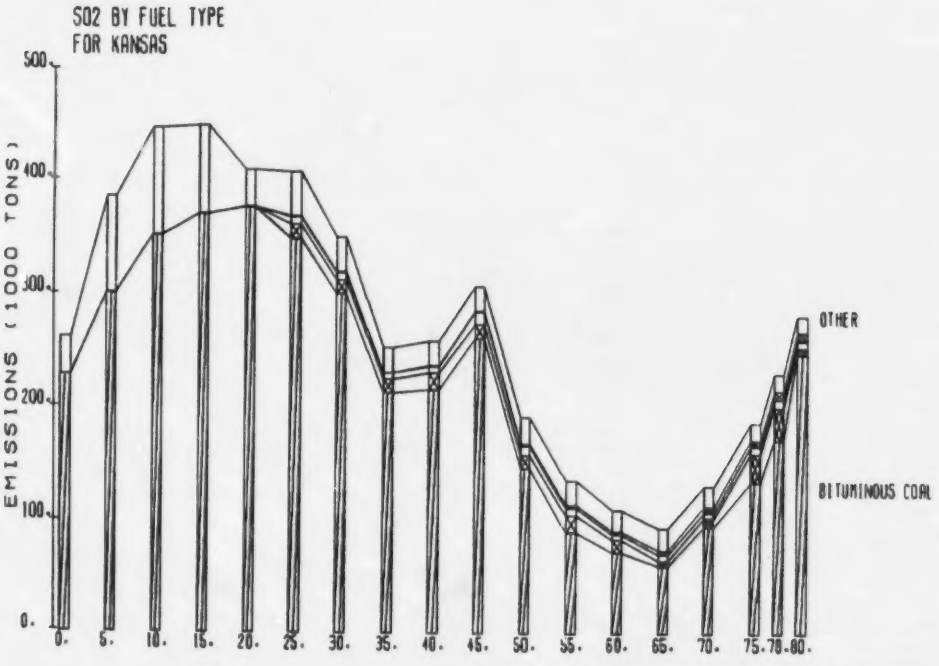


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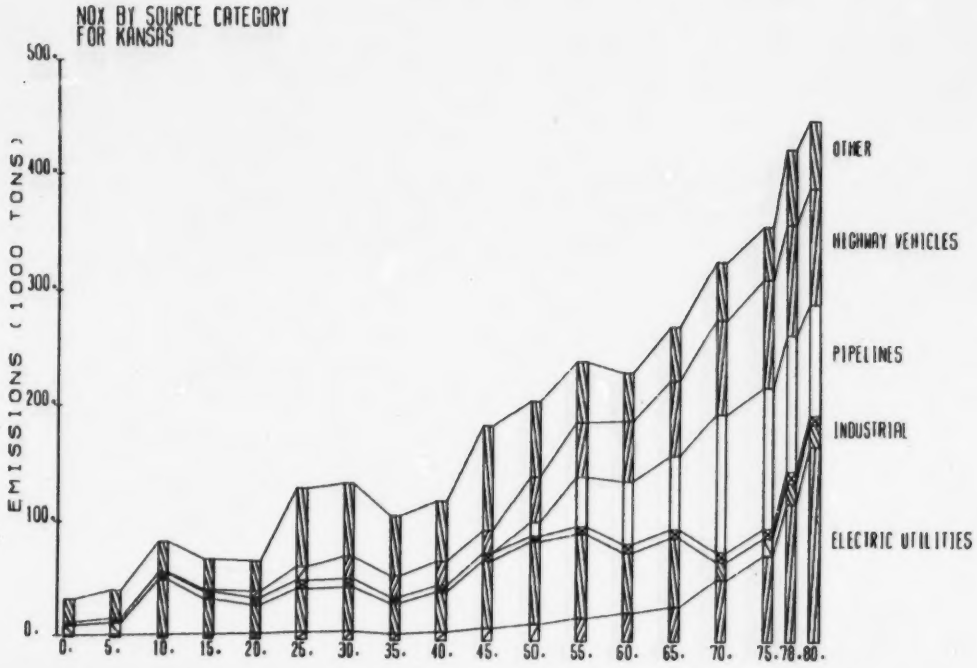


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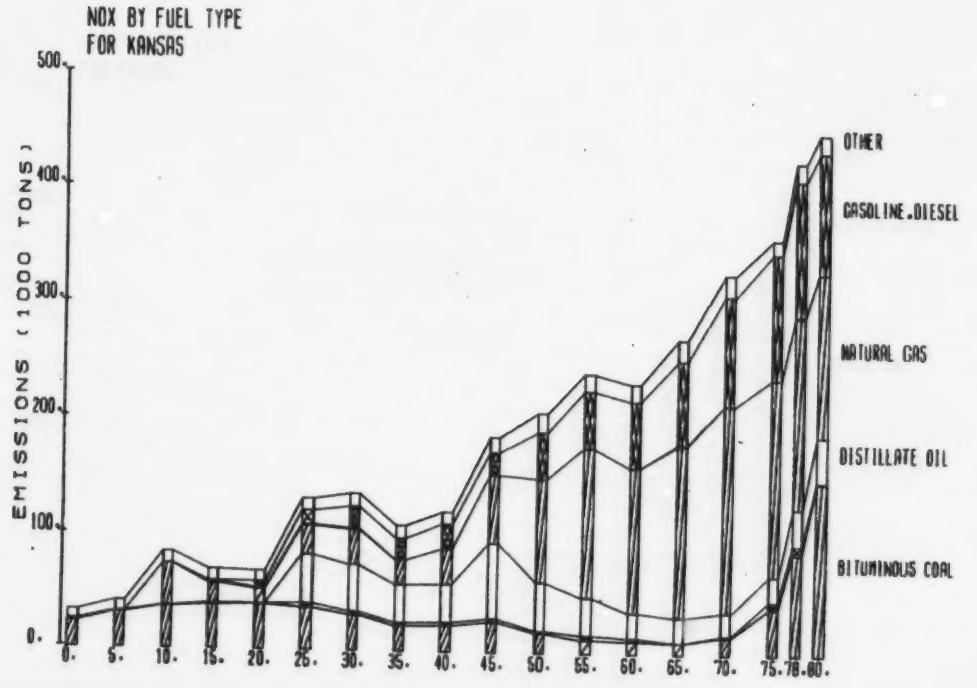


Figure 4.

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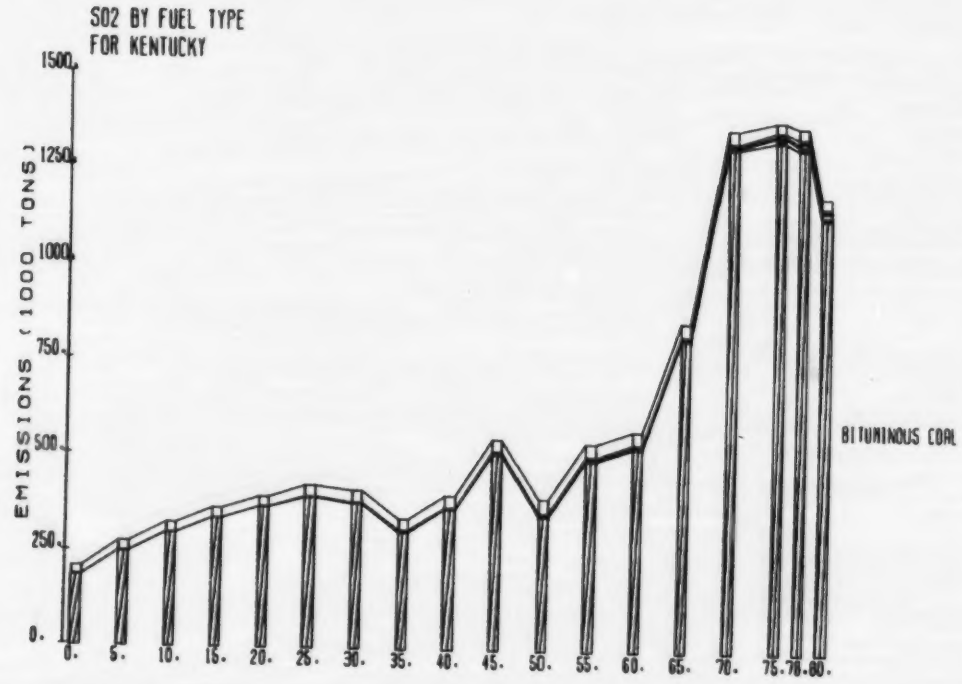


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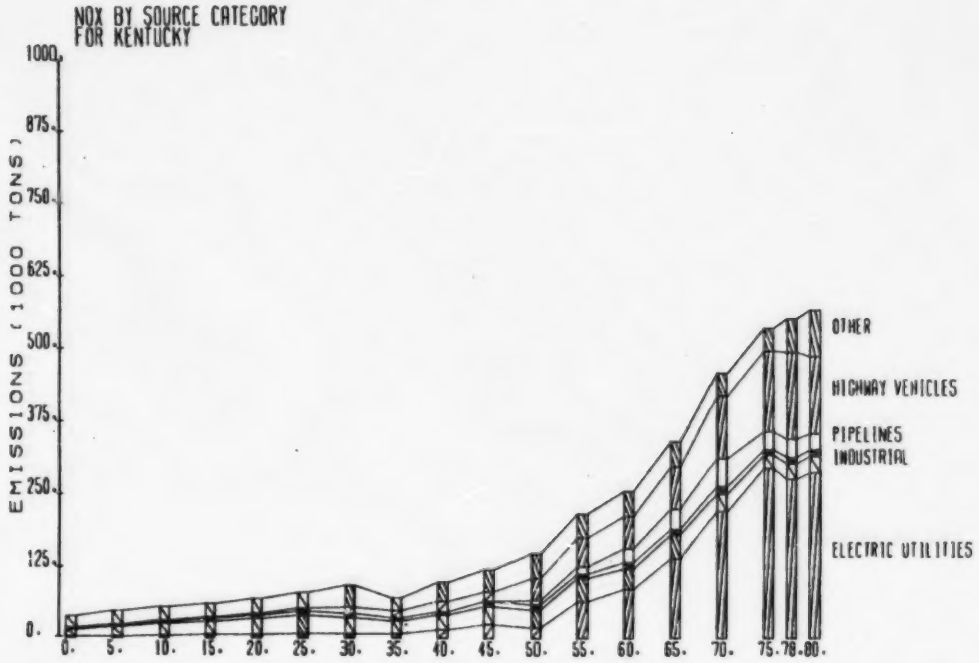


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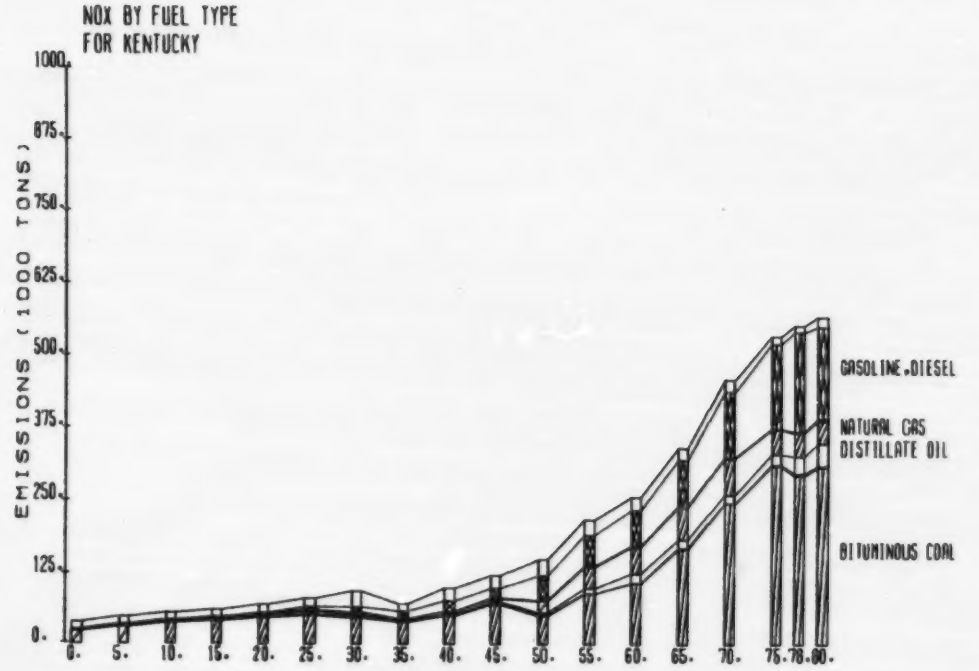


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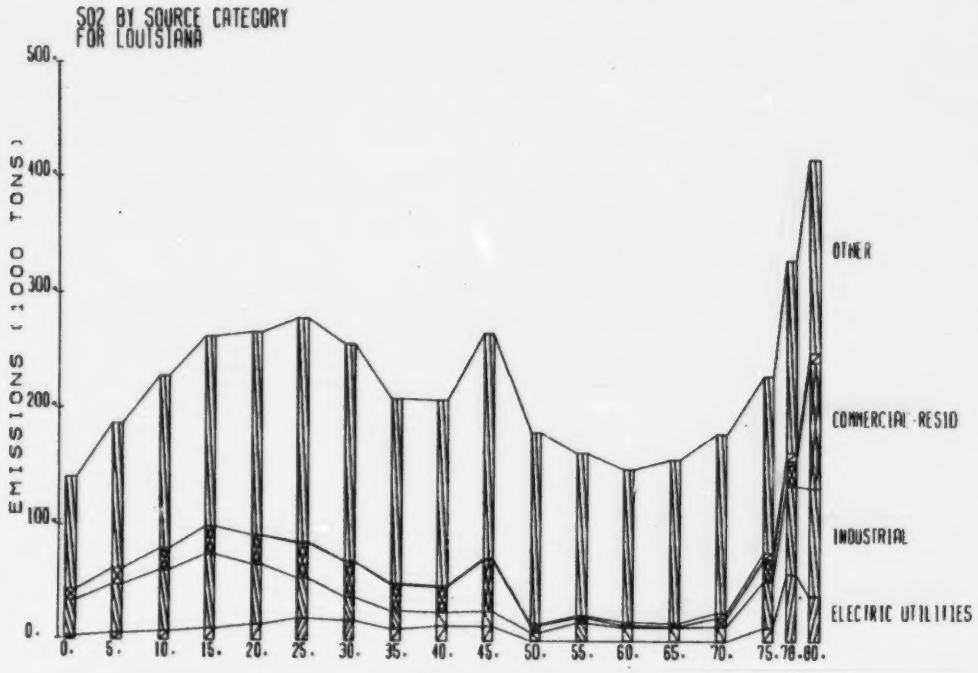
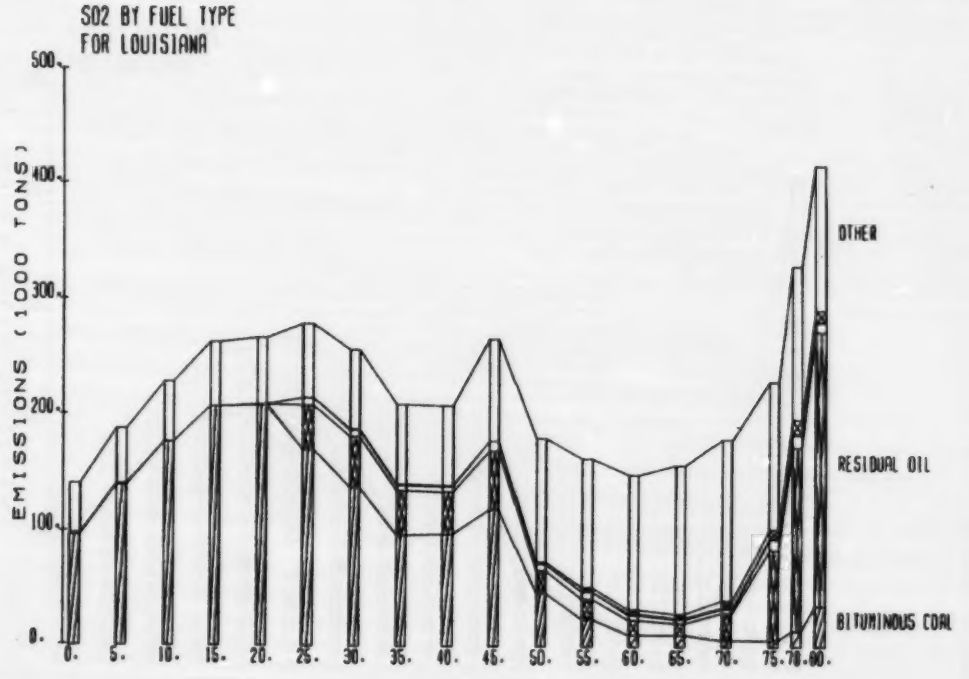



Figure 1.

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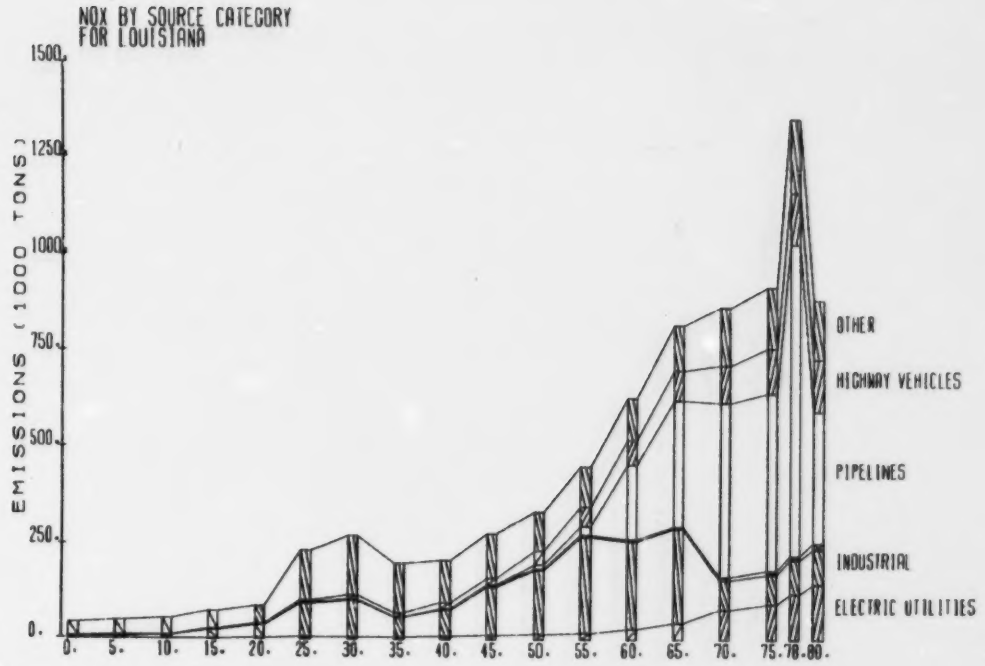


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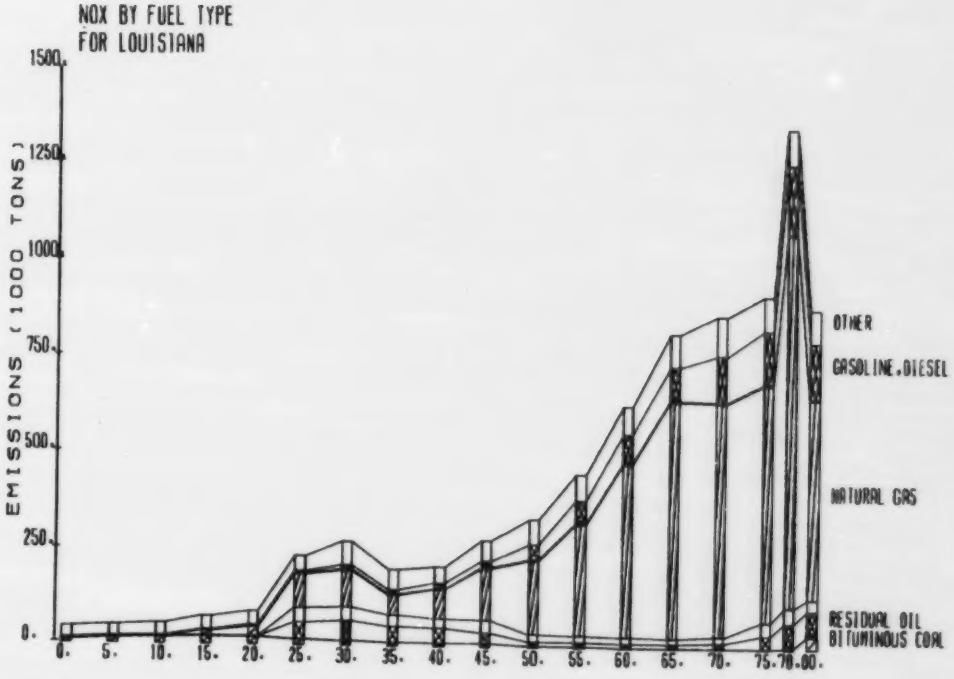


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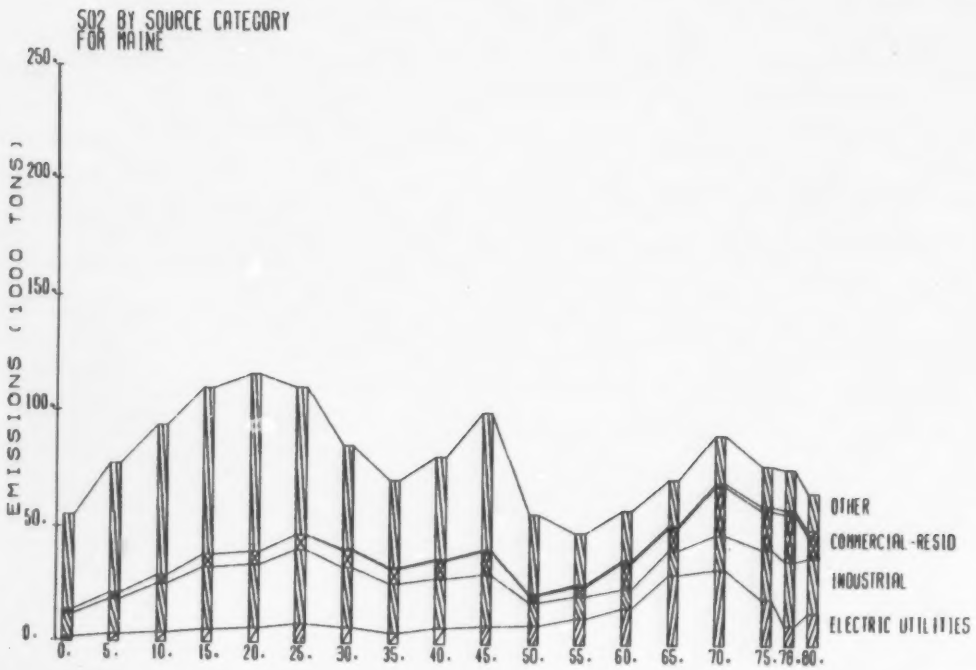


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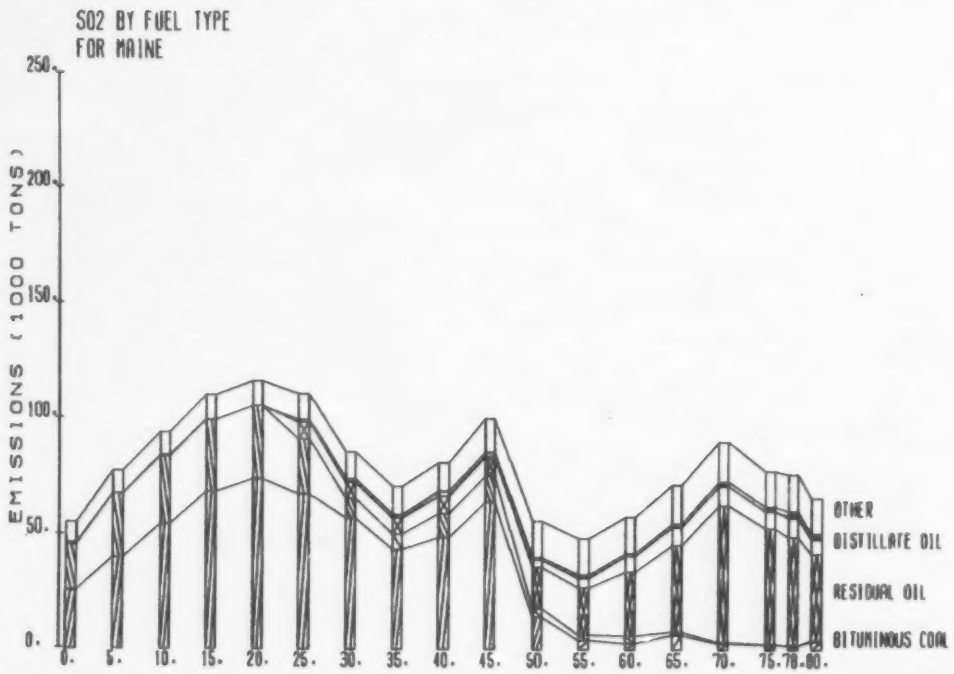


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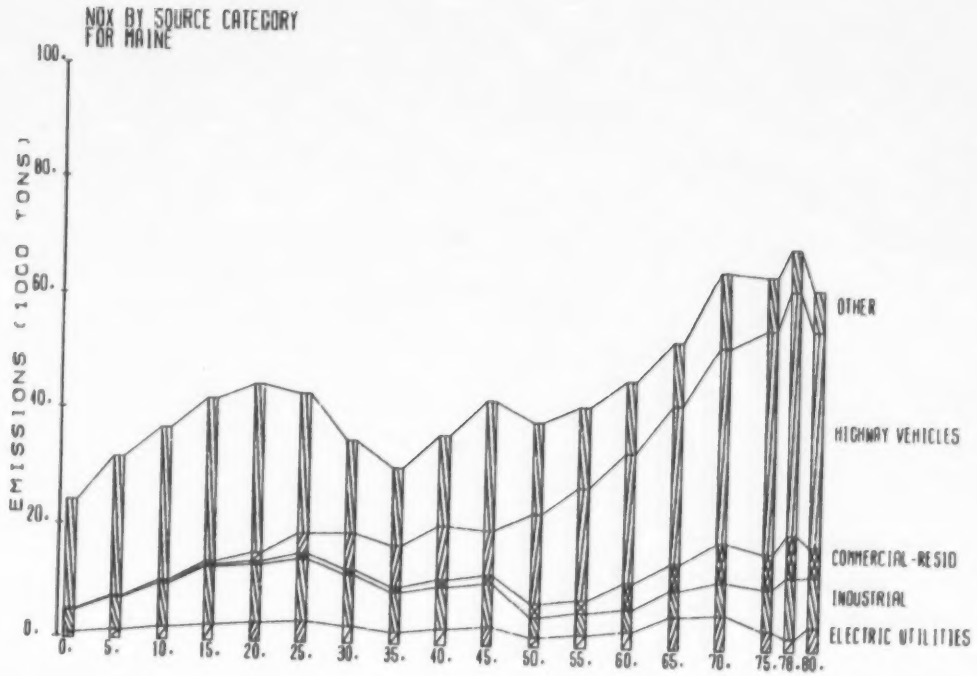


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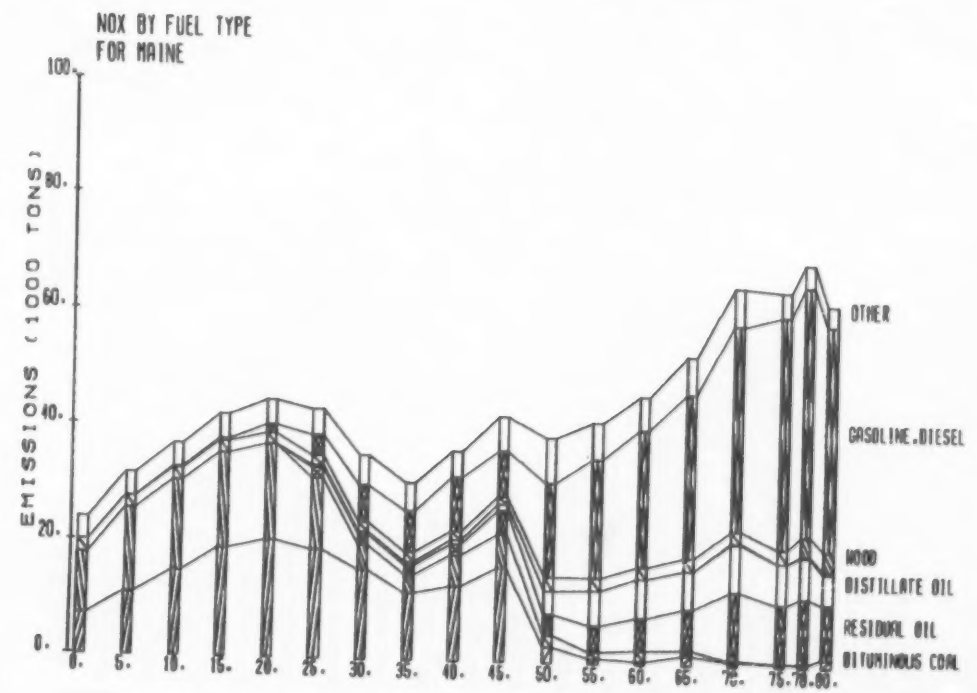


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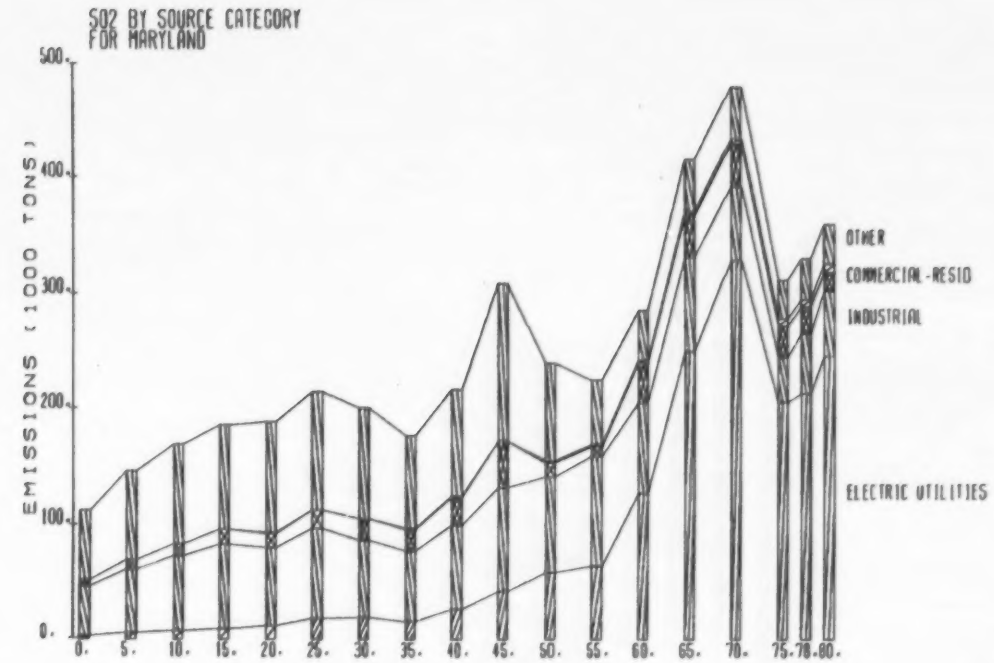


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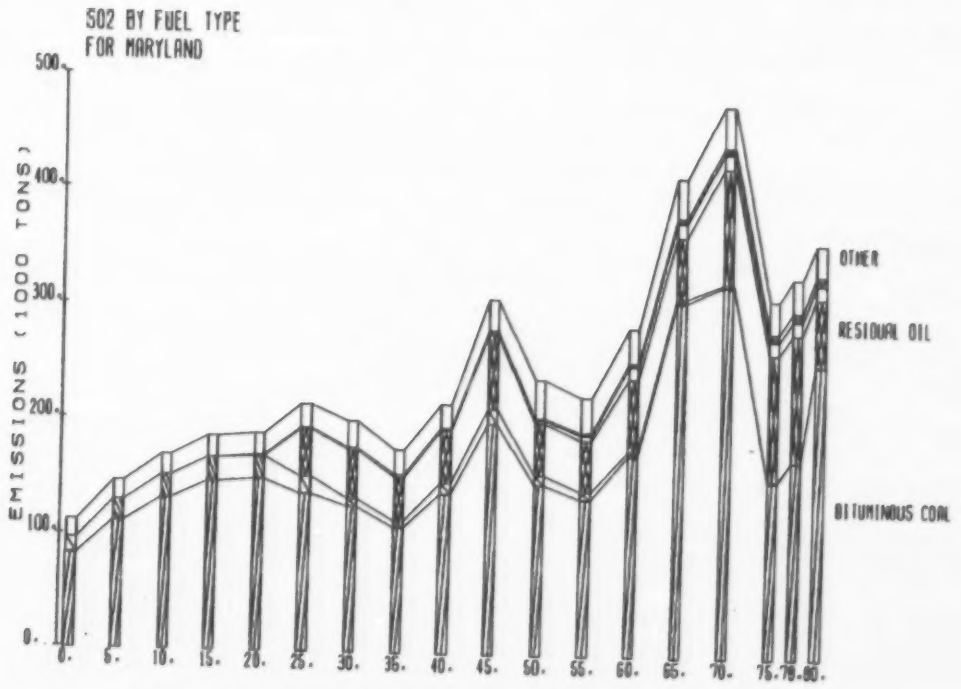


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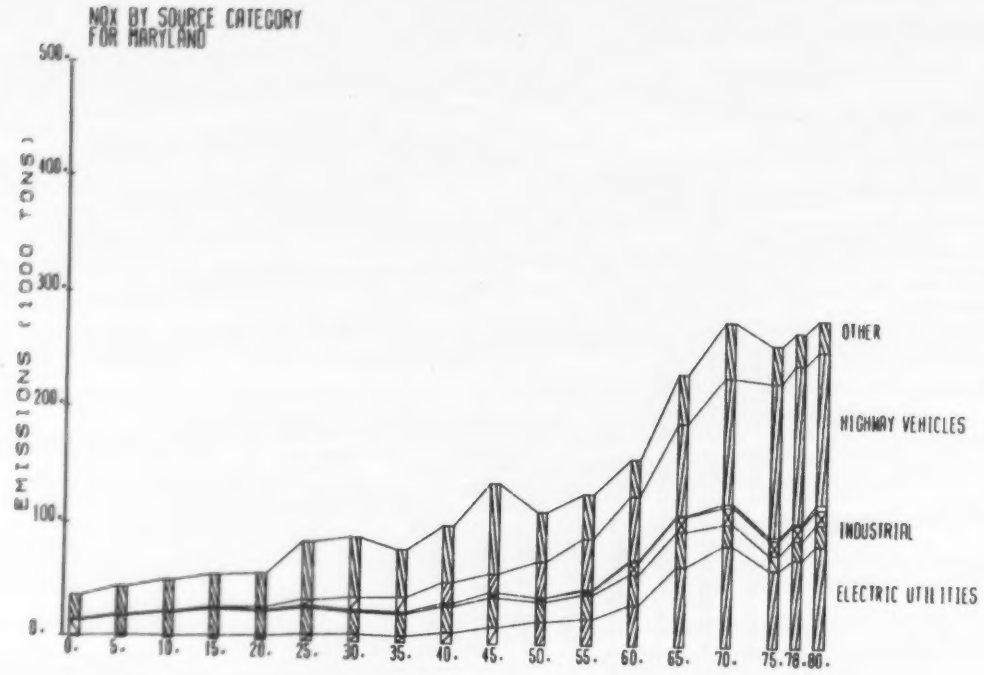


Figure 3.

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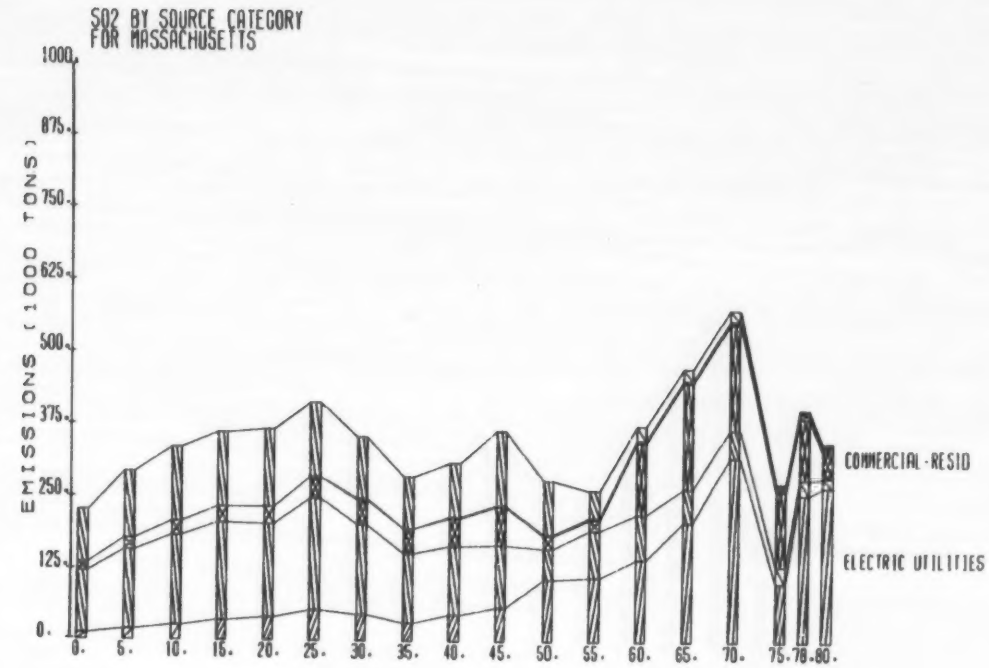


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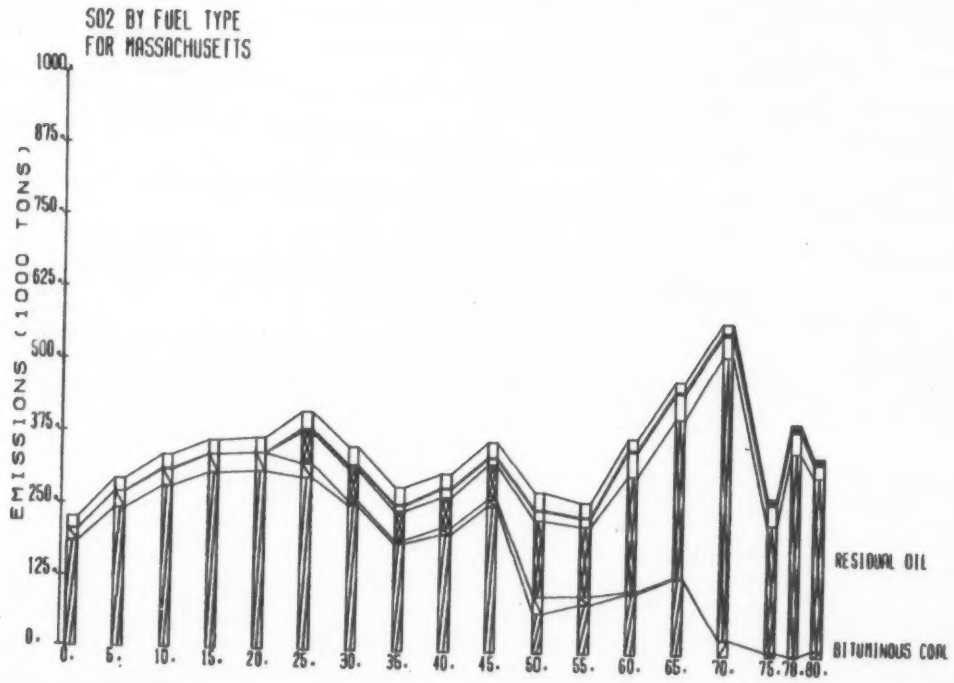
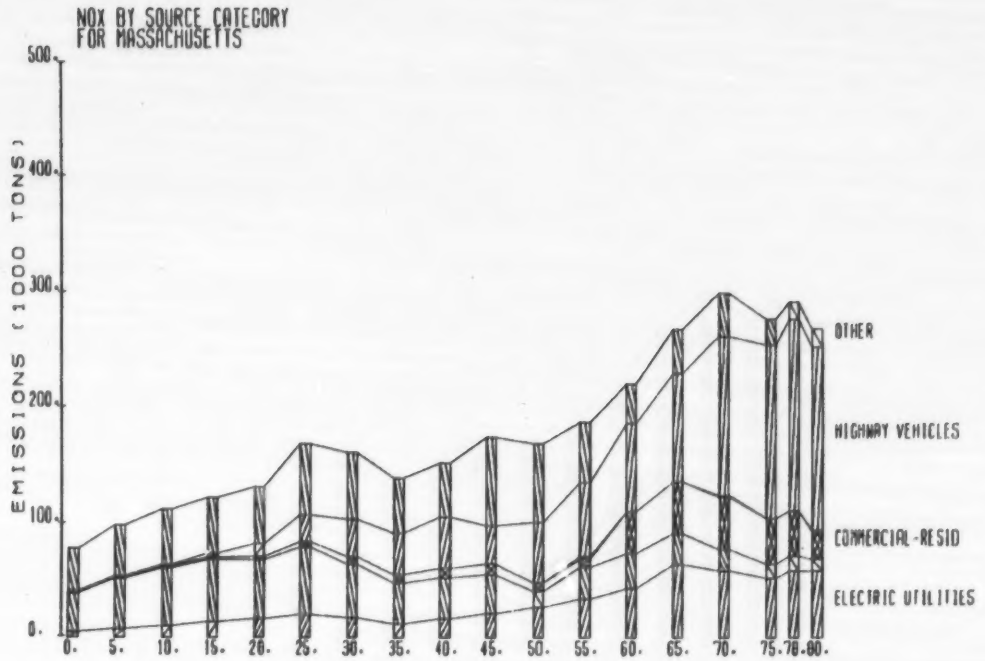



Figure 2.

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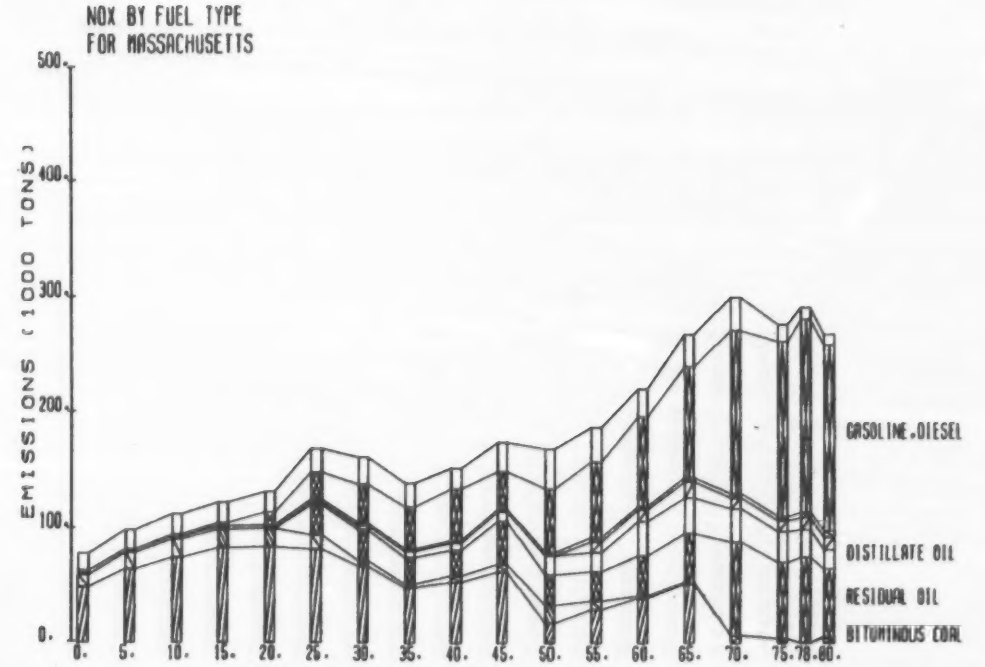


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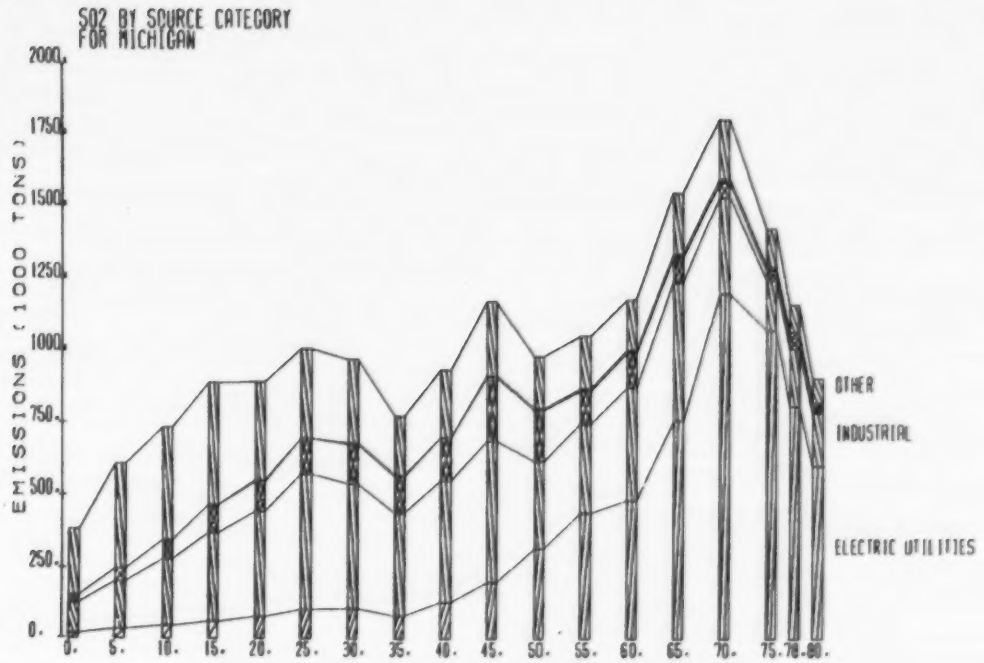


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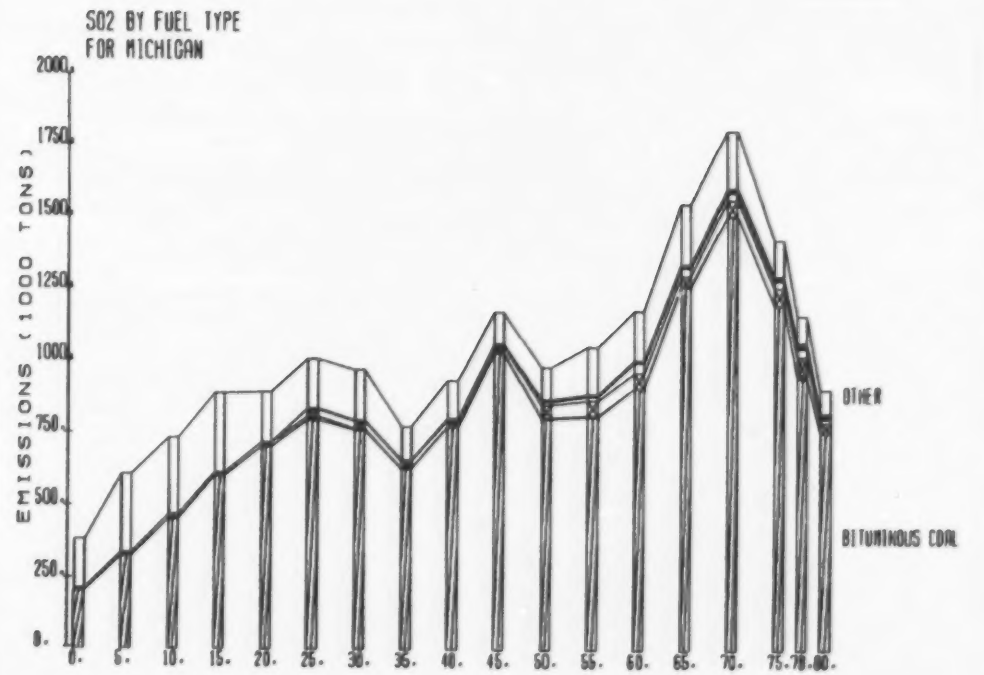


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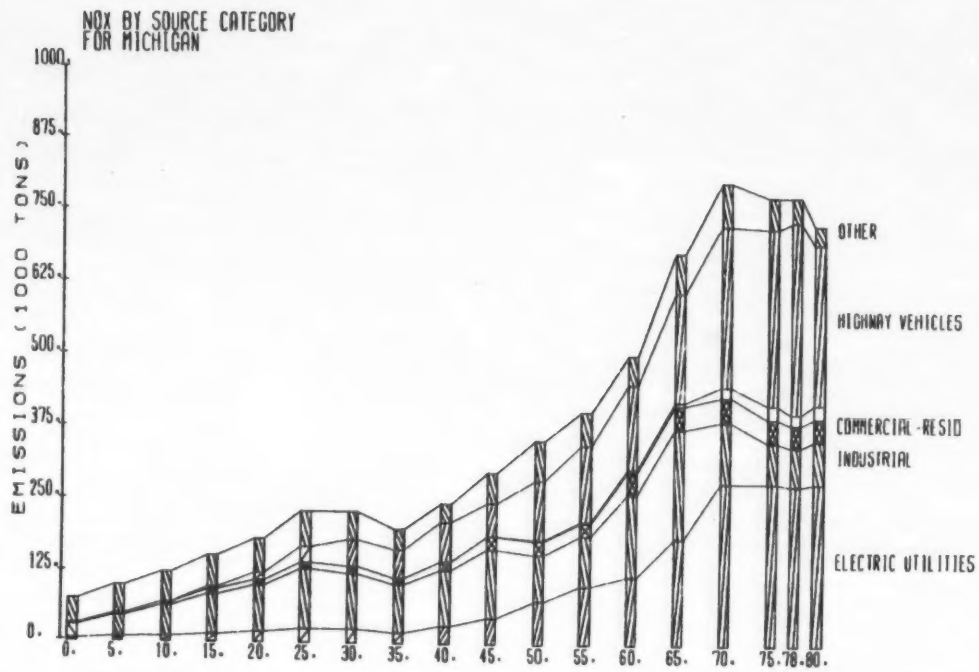


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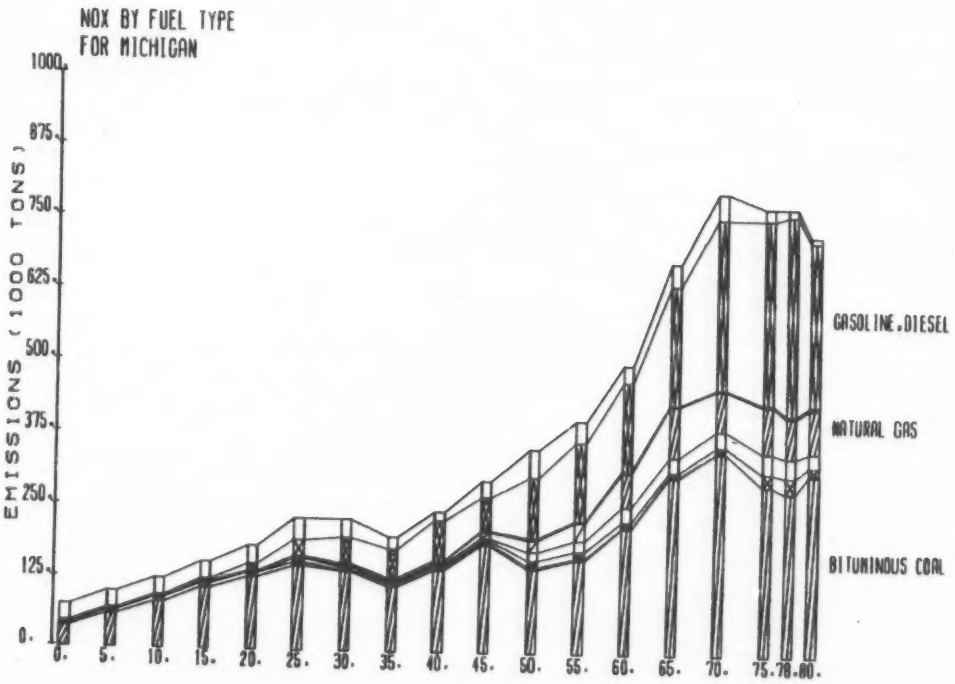


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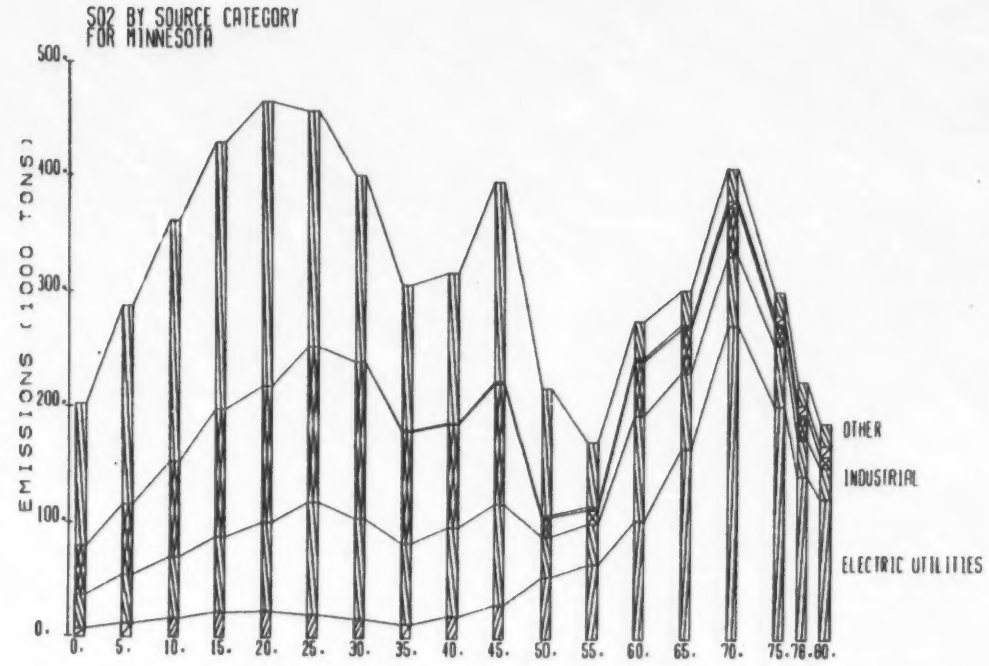


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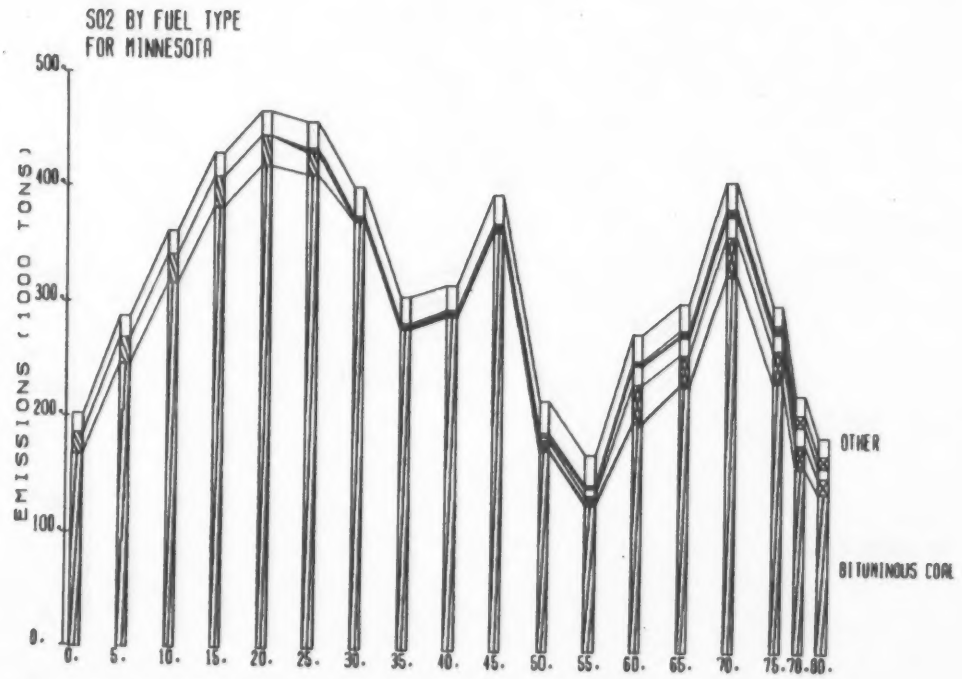


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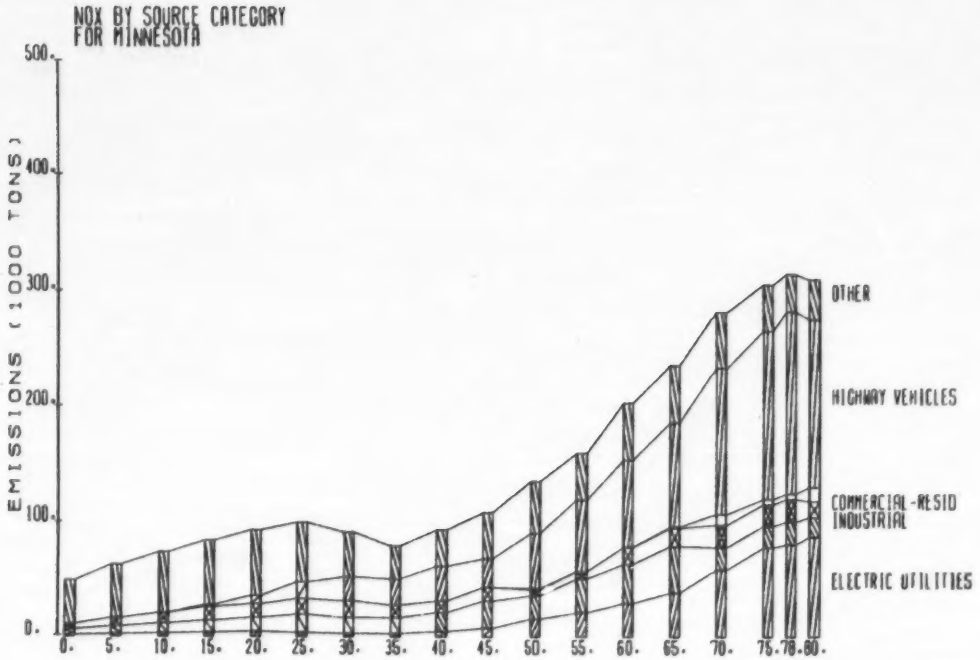


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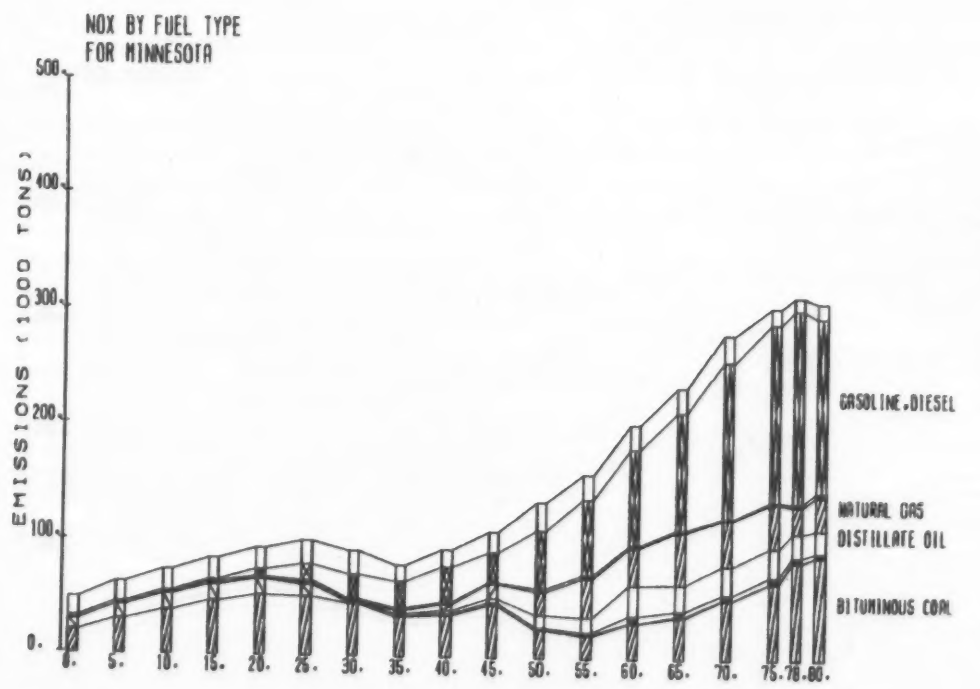


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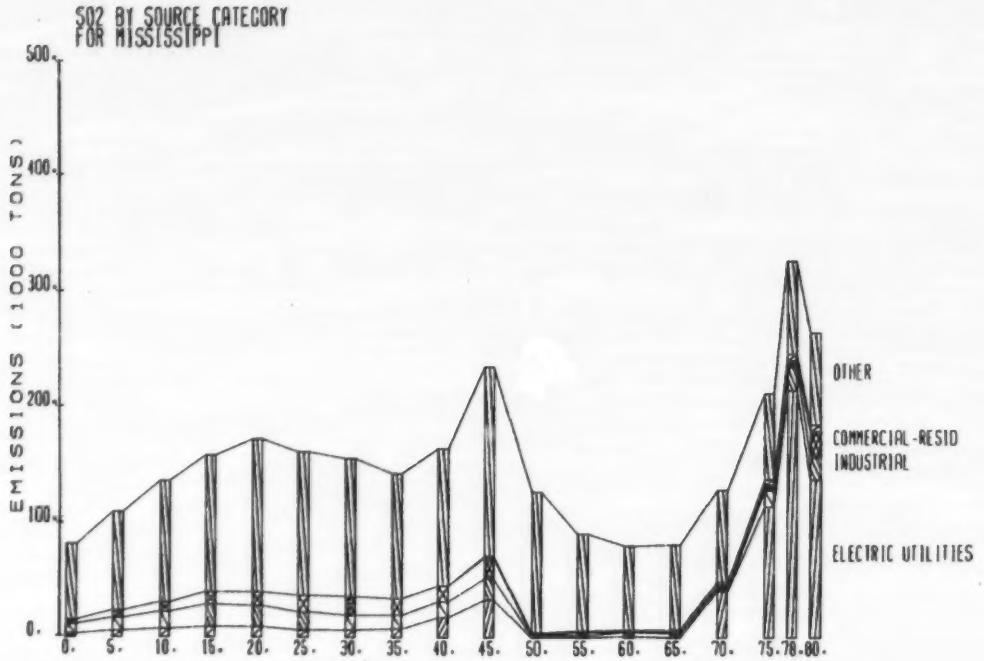


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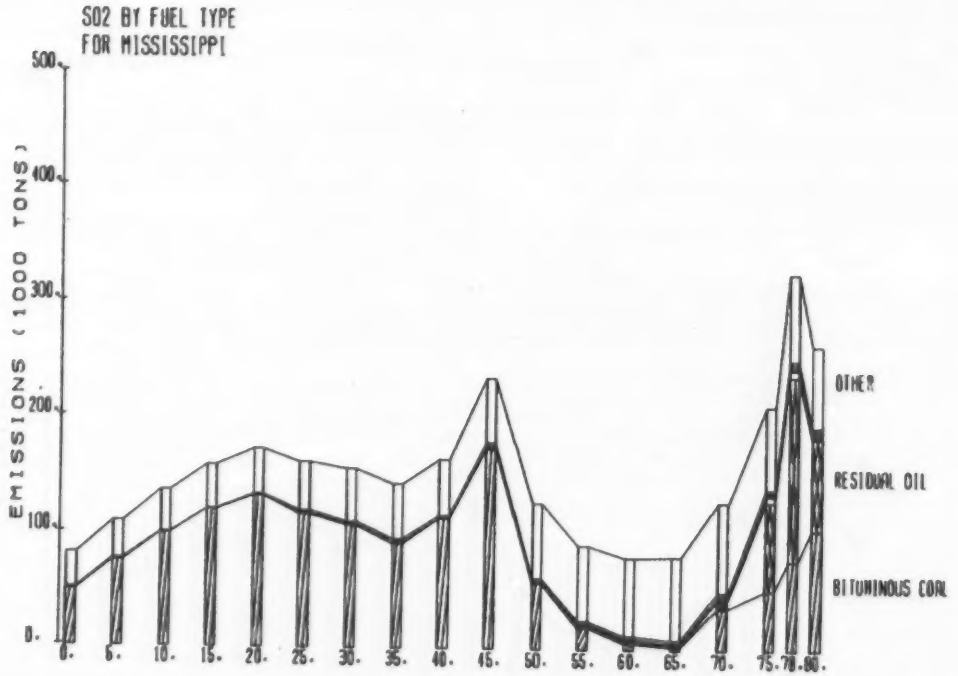


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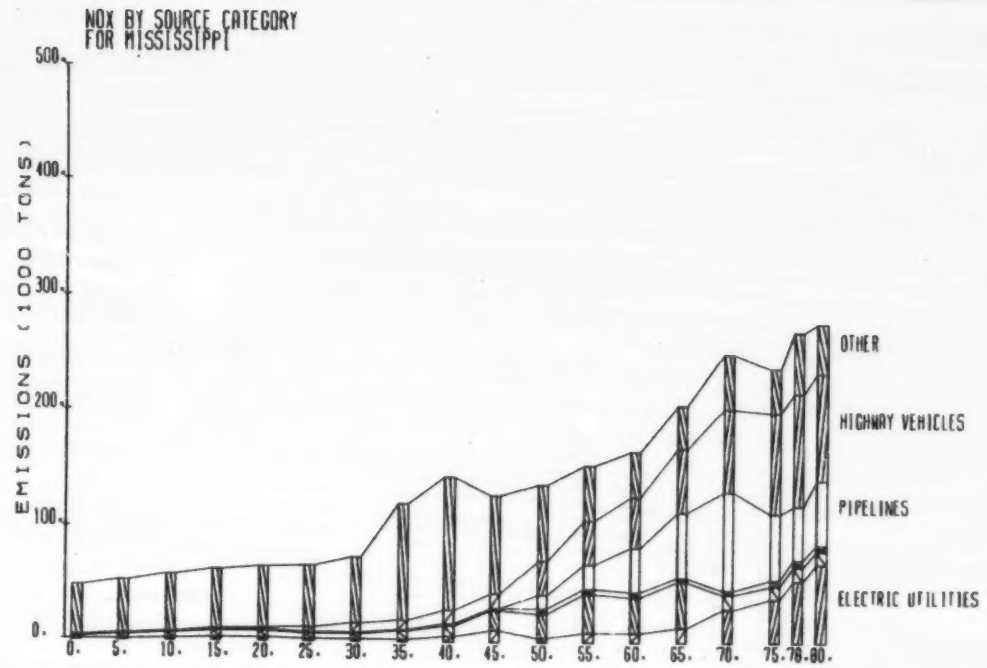


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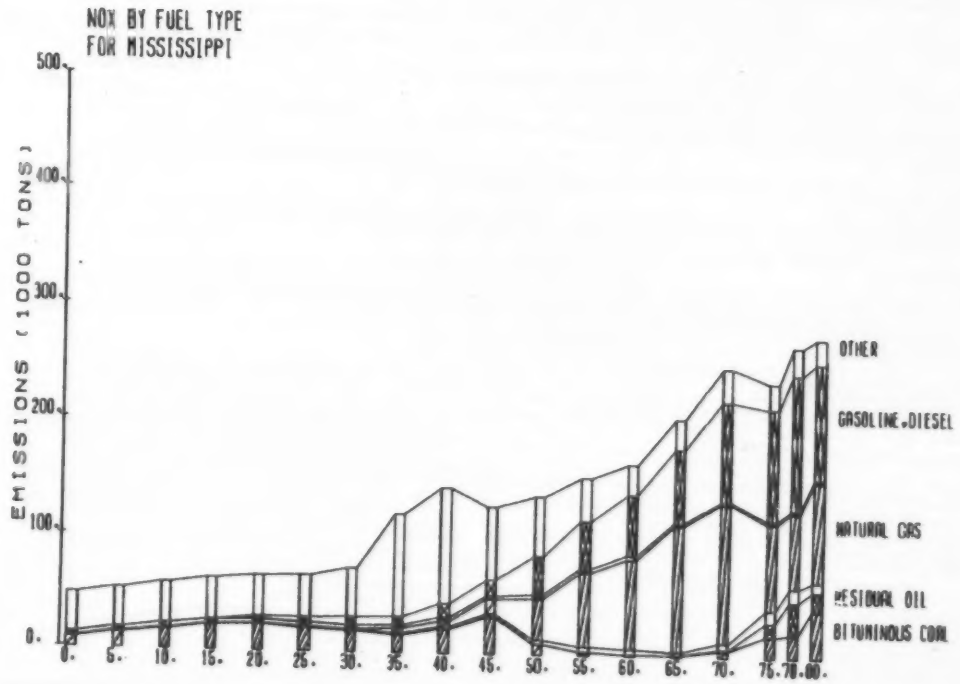


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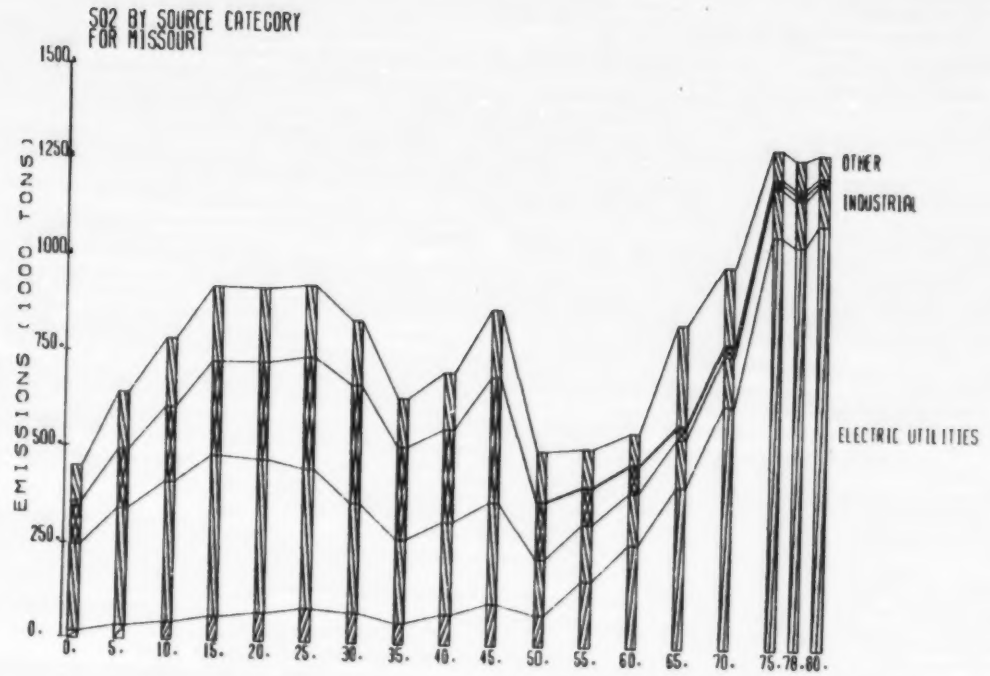


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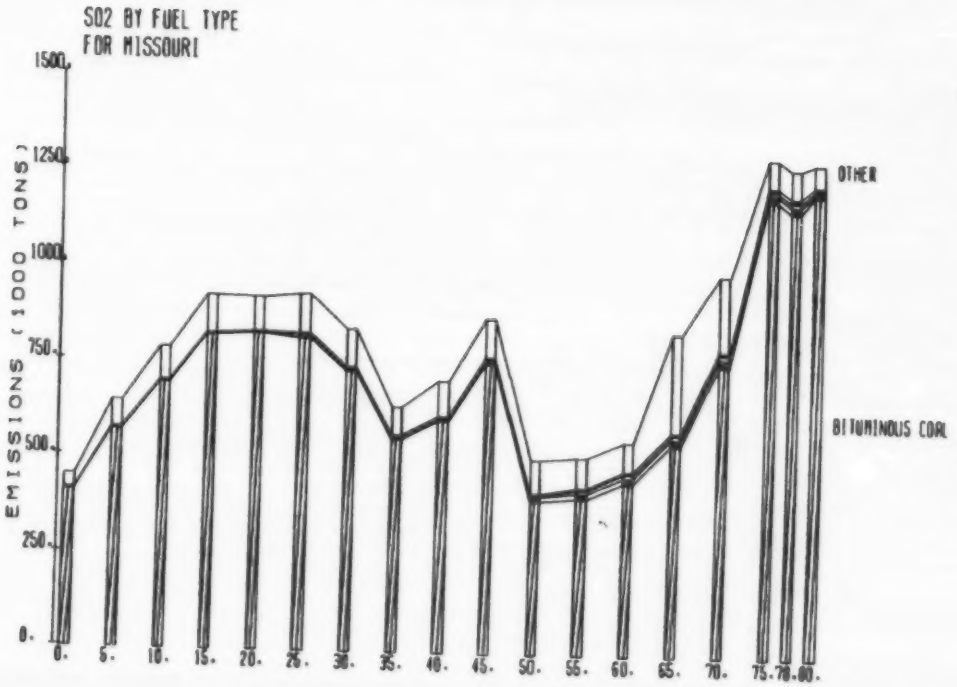


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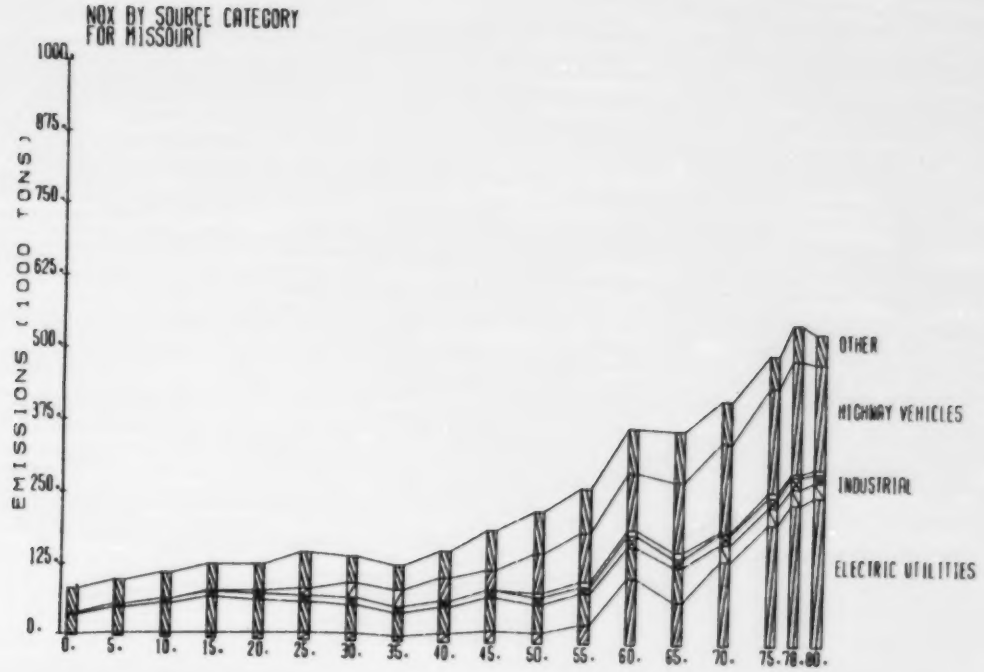


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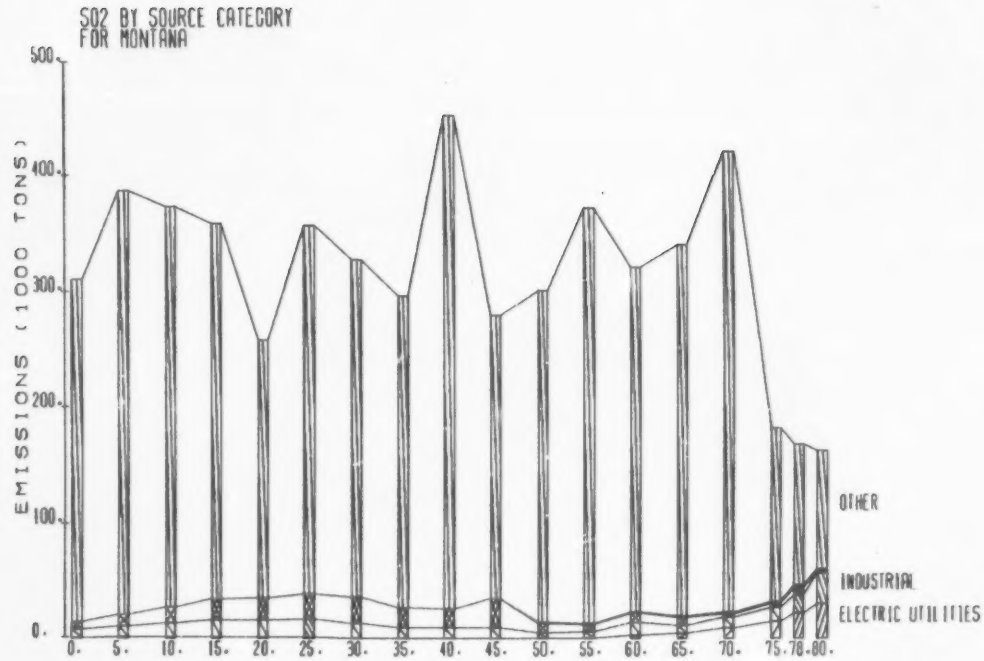


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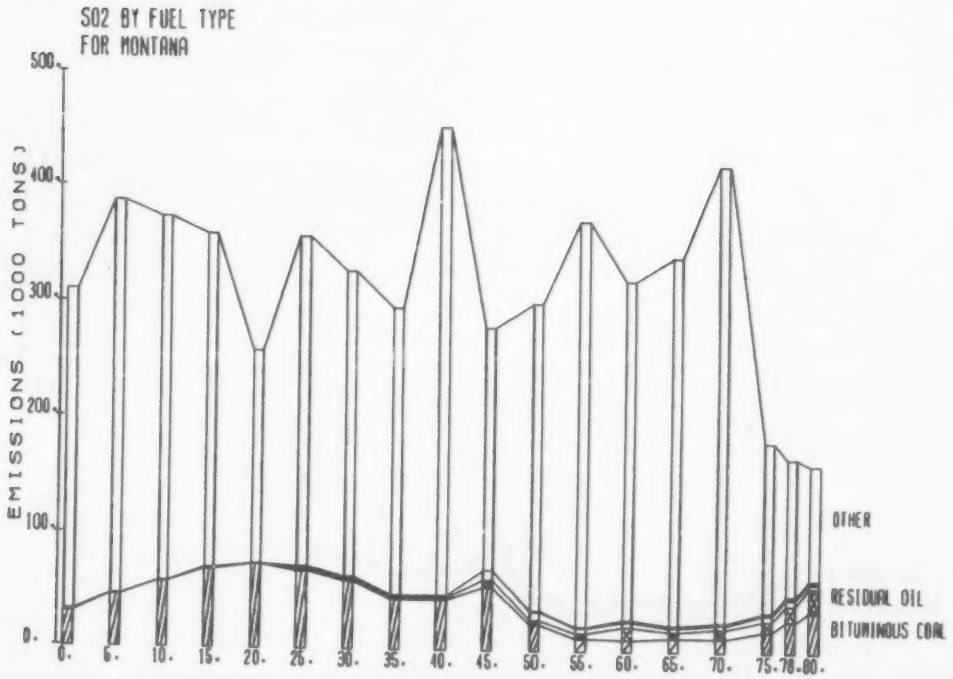


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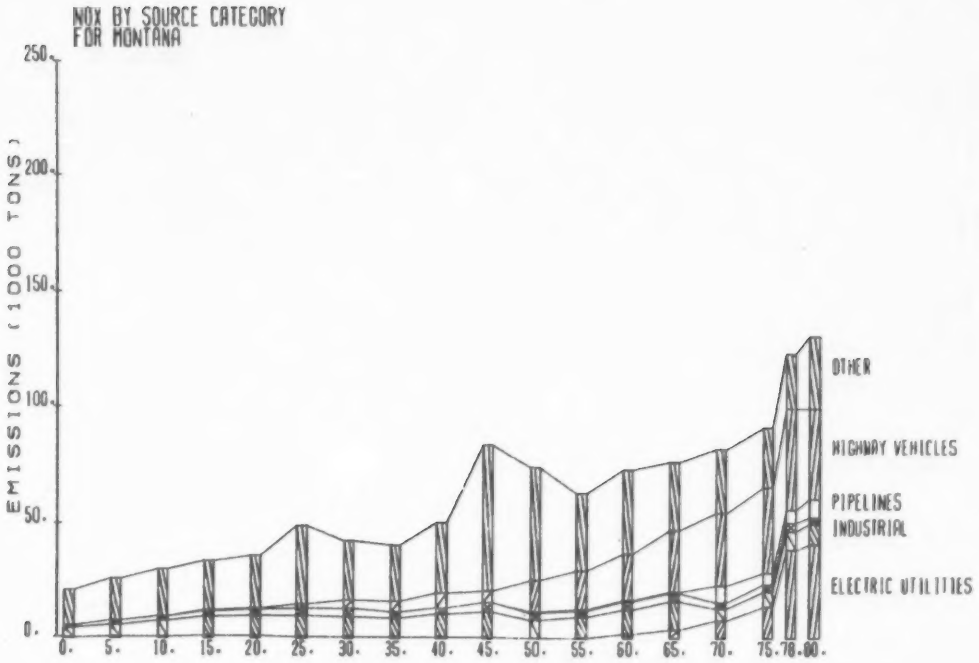


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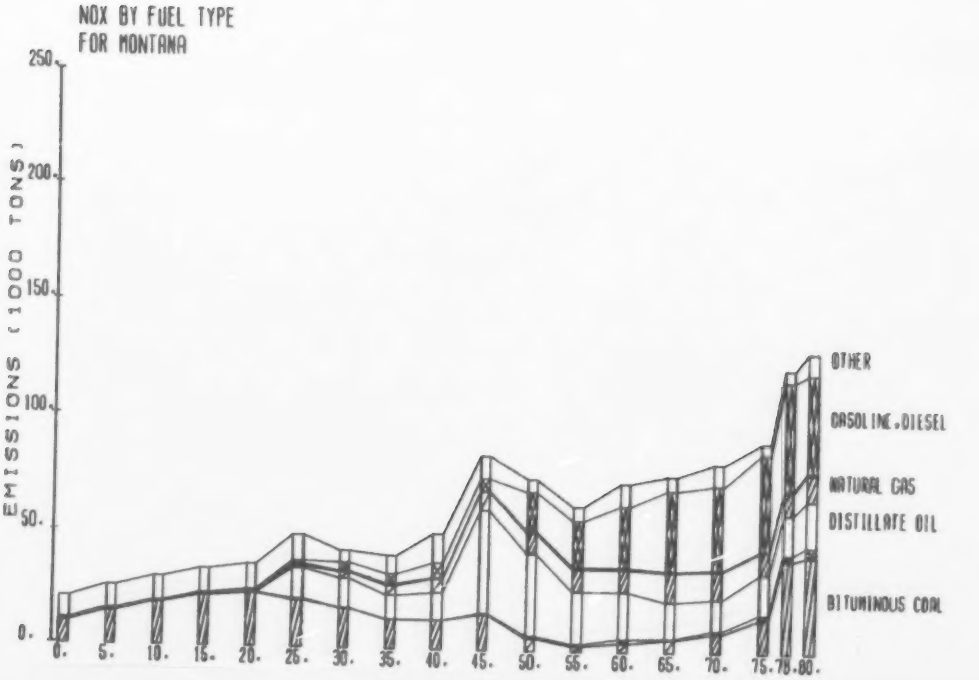


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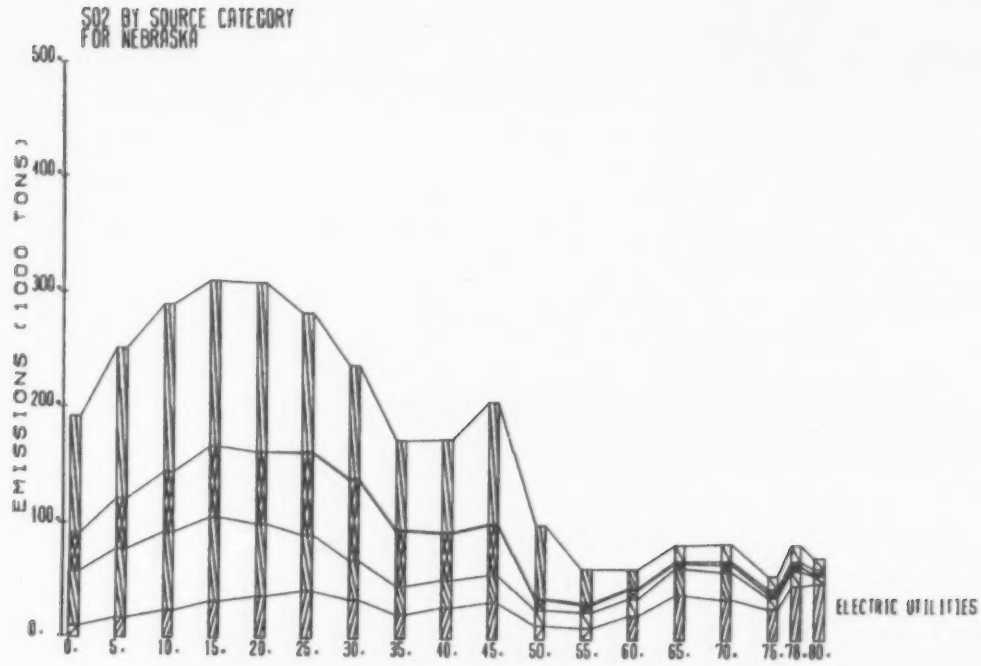


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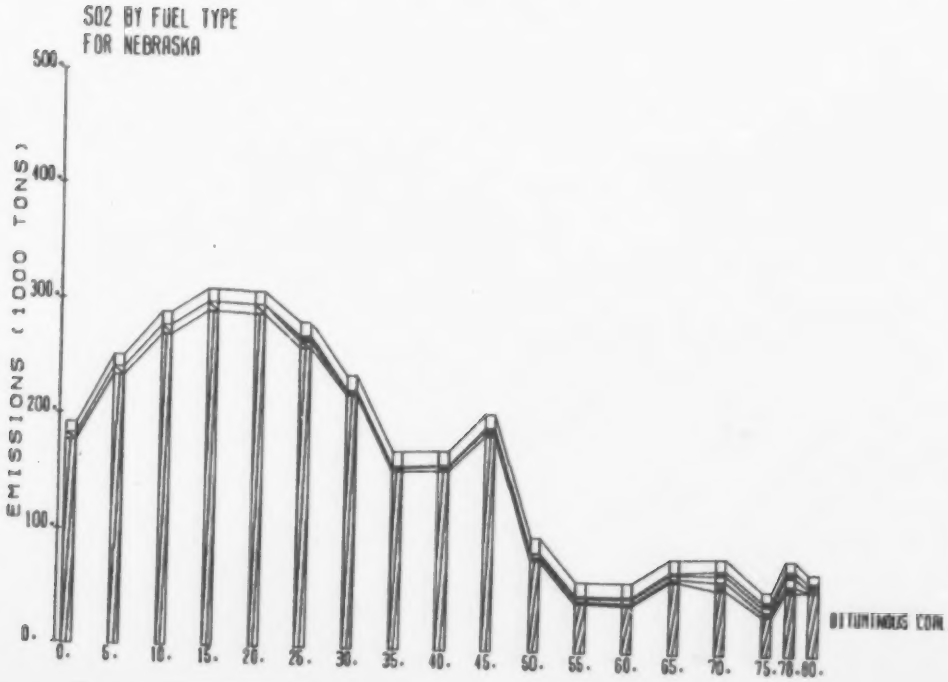


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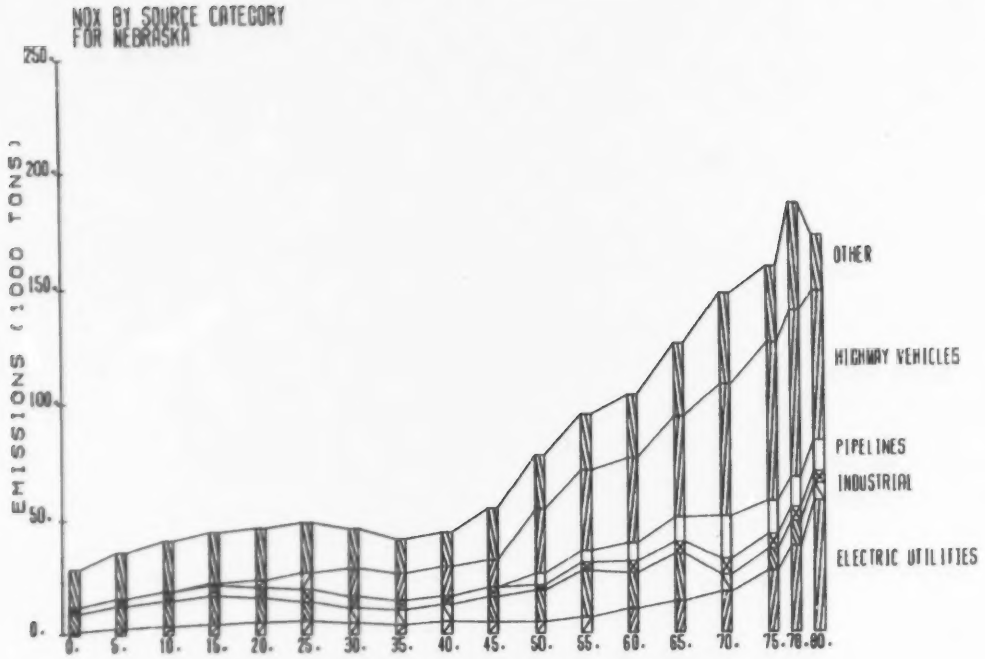


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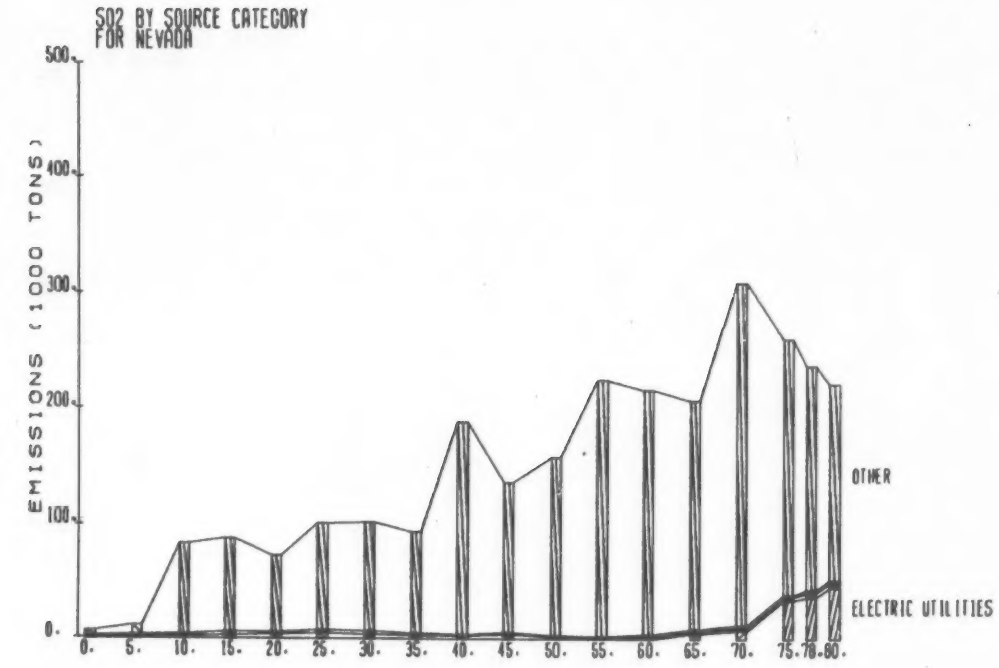


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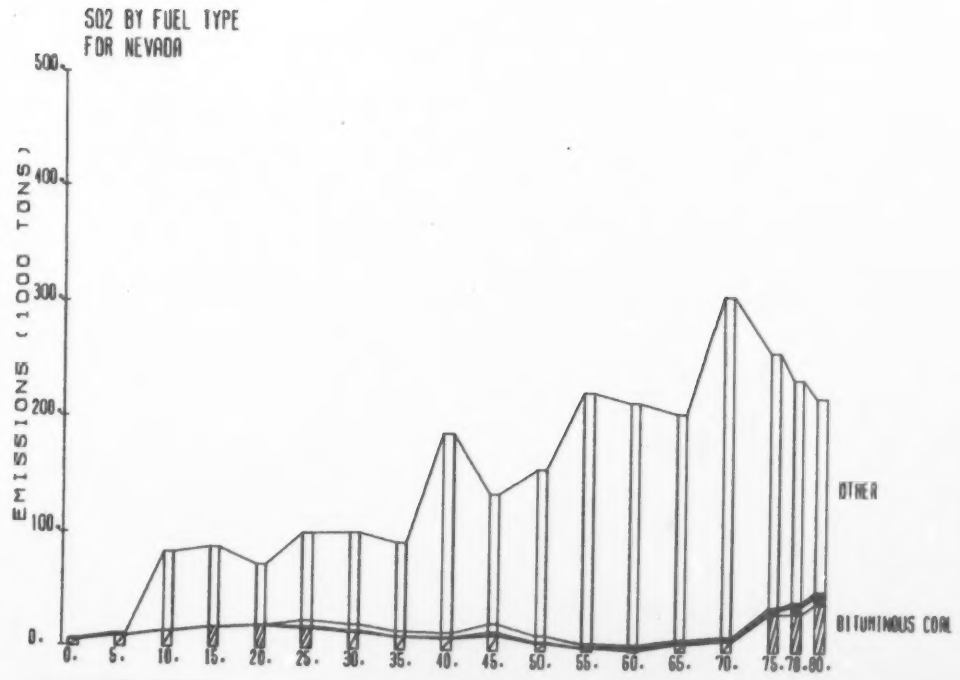


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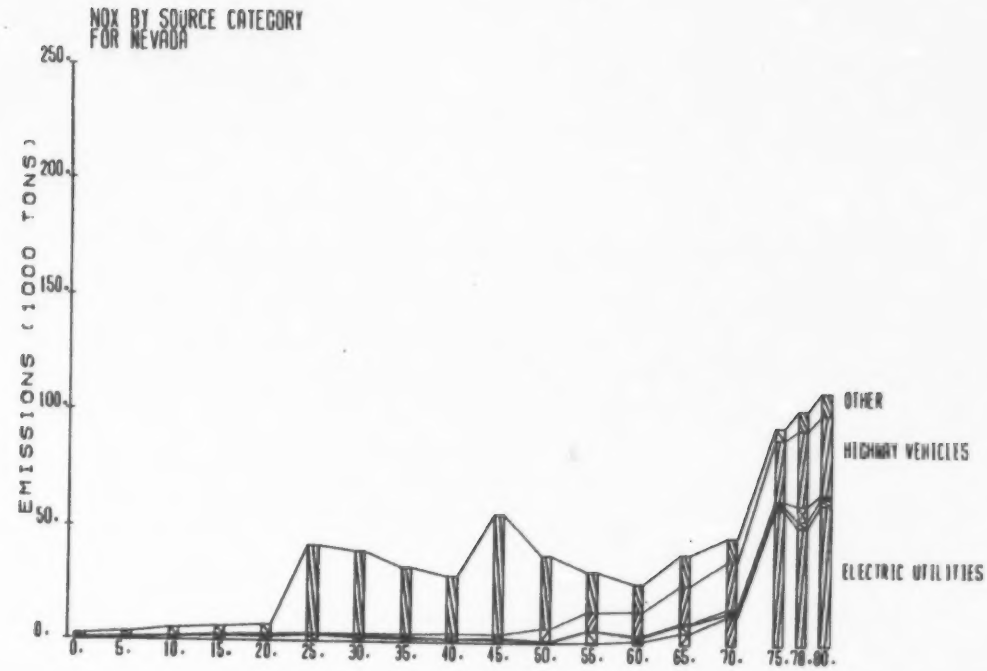


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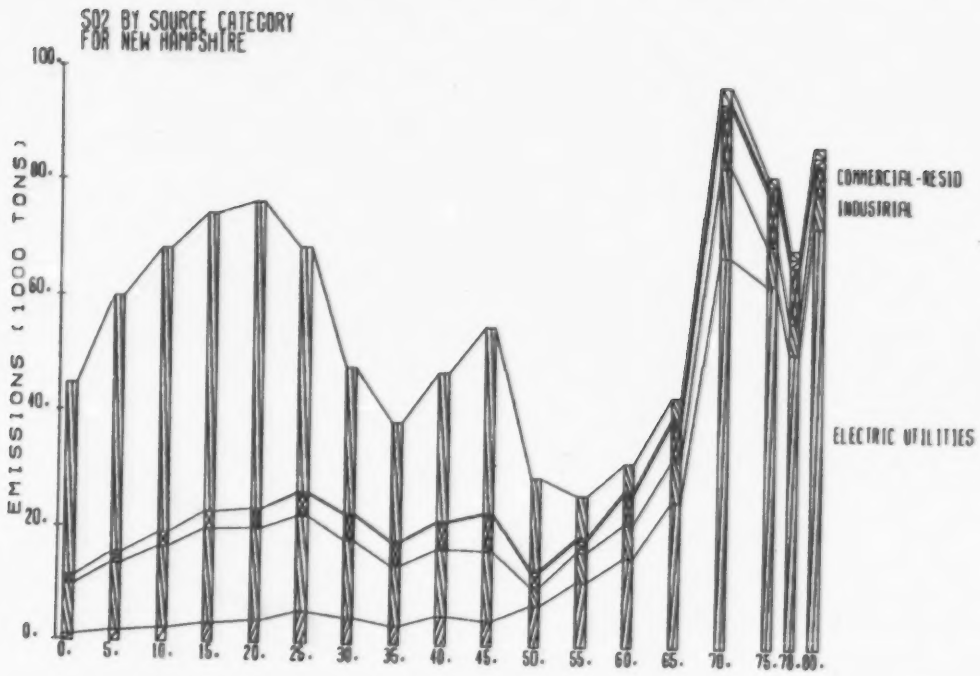


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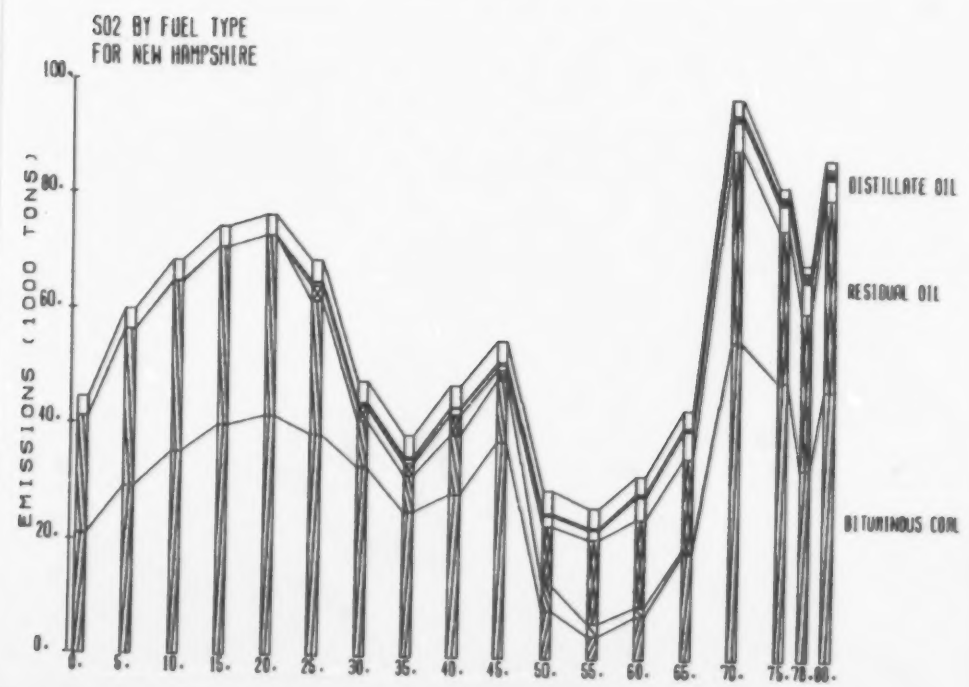


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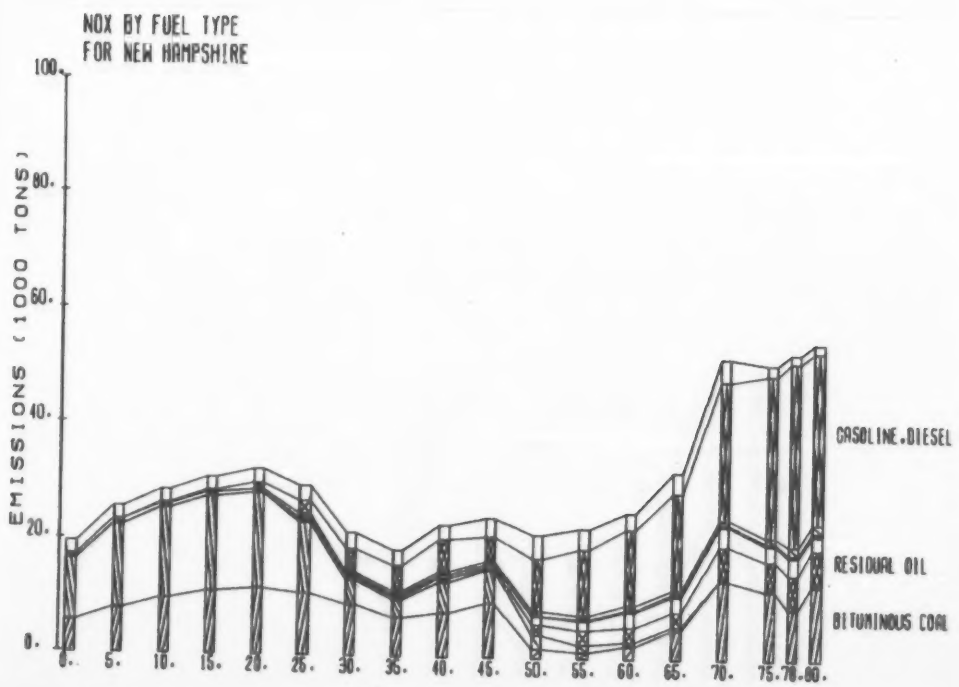


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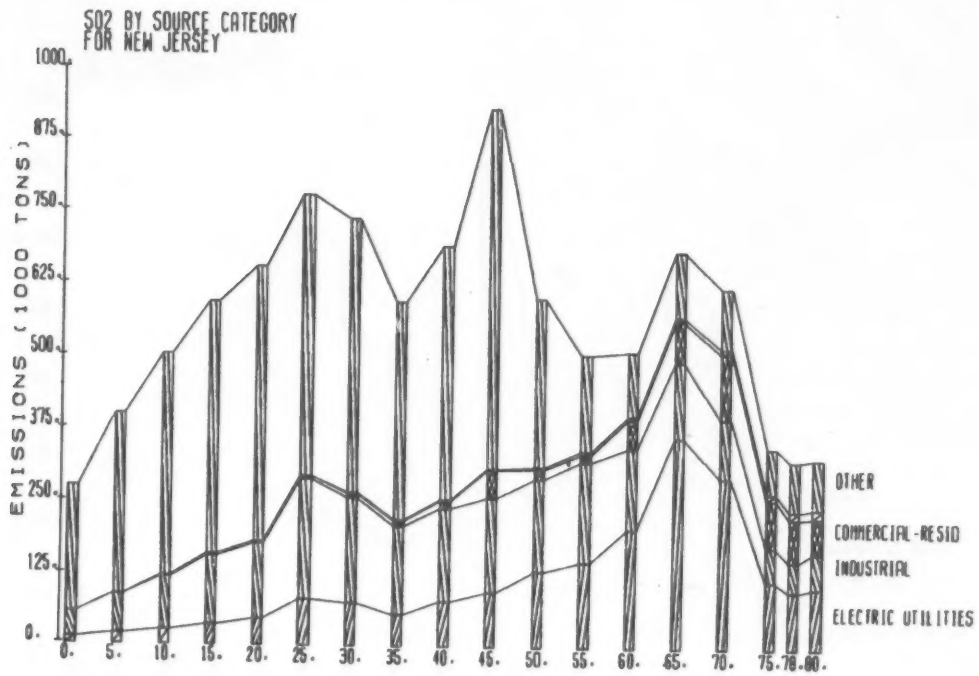
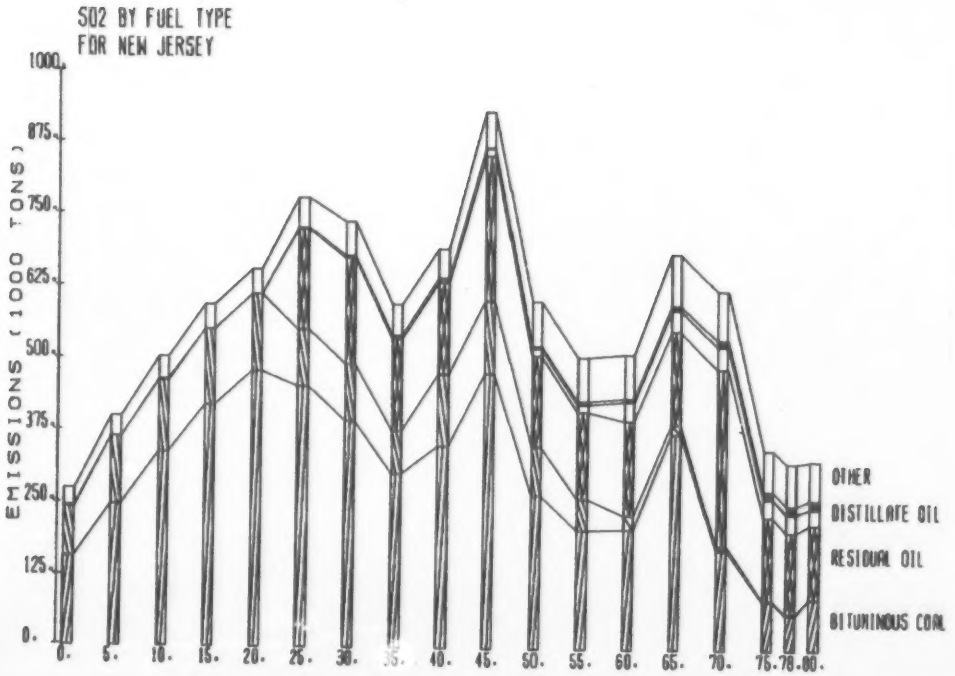



Figure 1.

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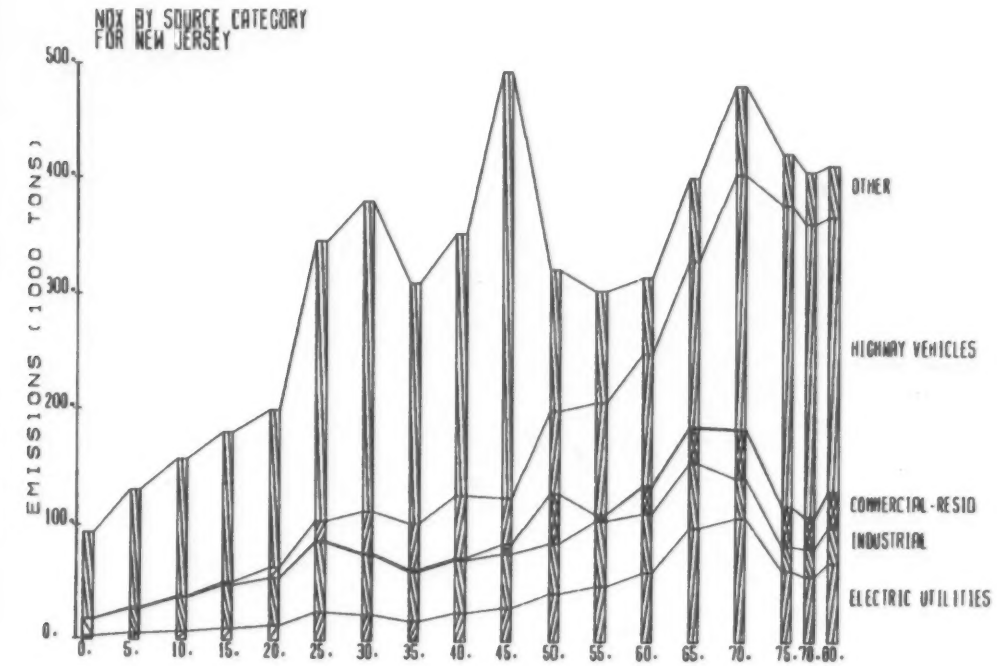


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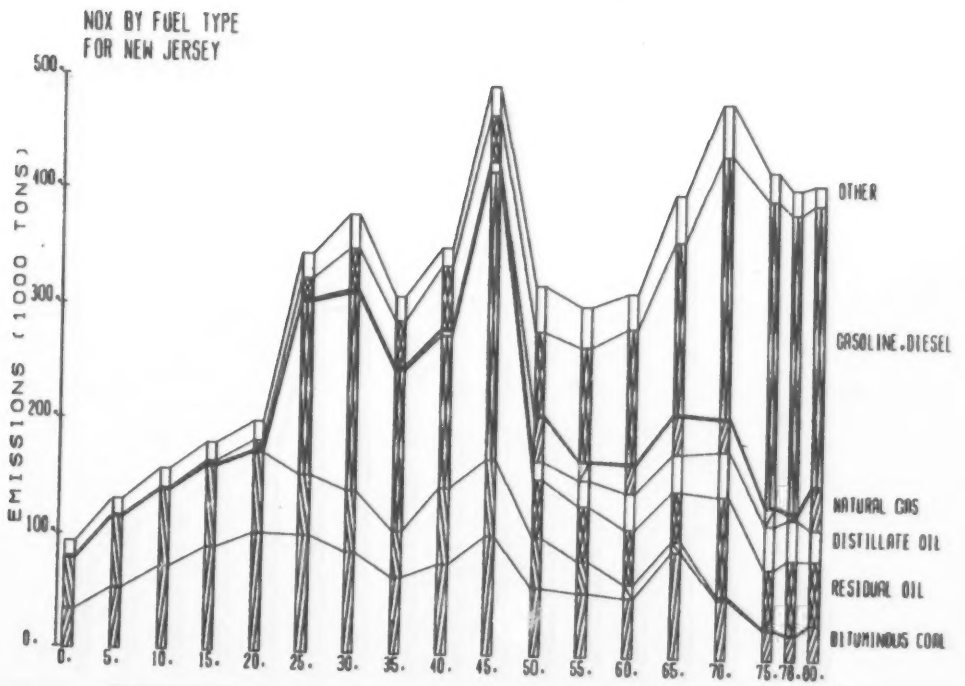


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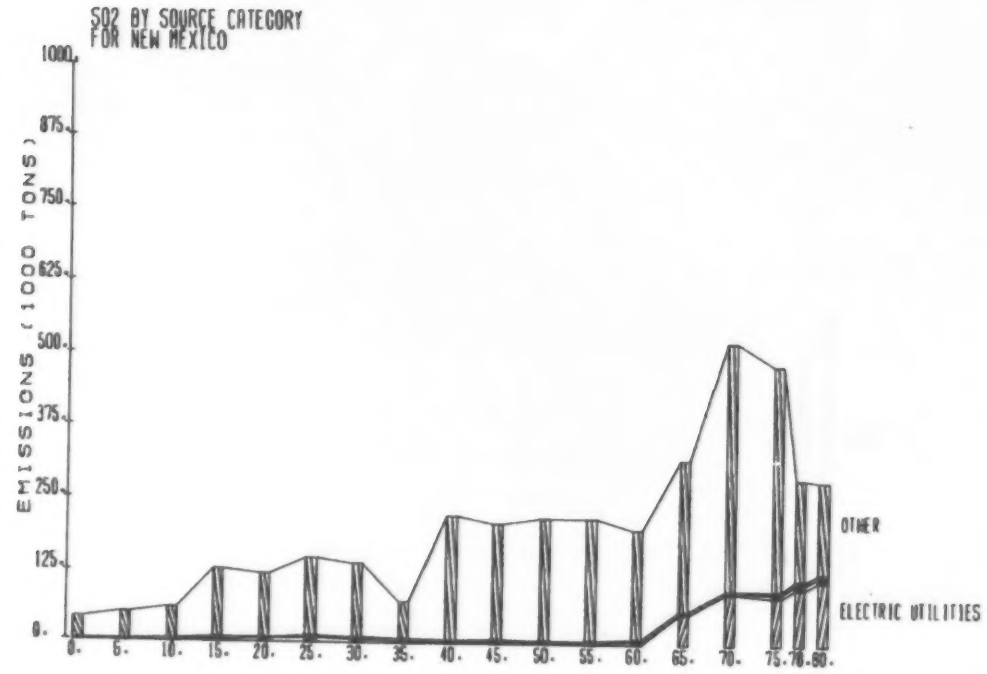
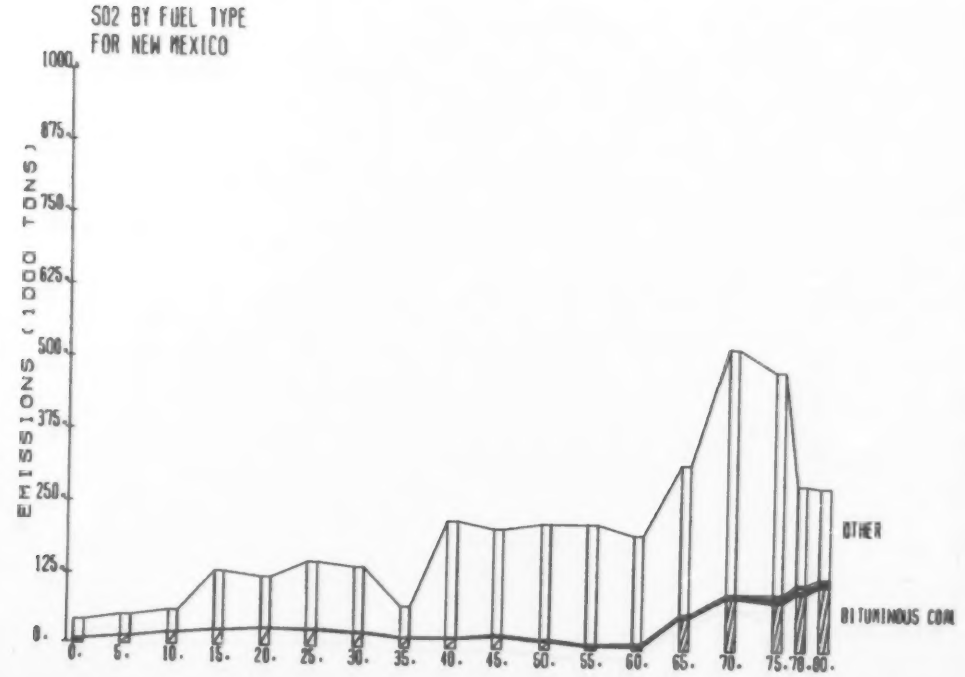



Figure 1.

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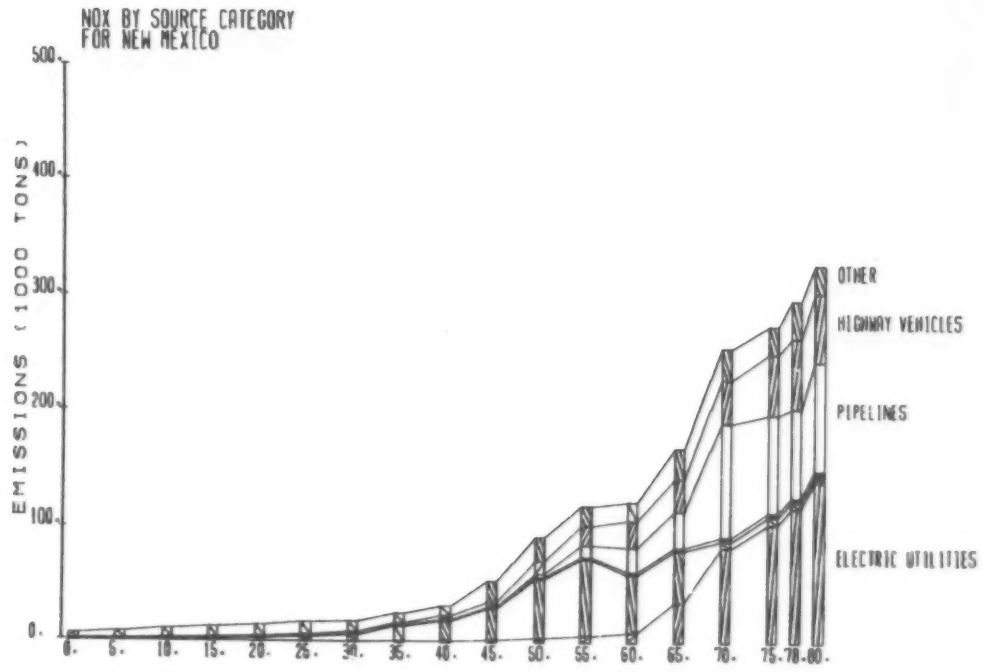


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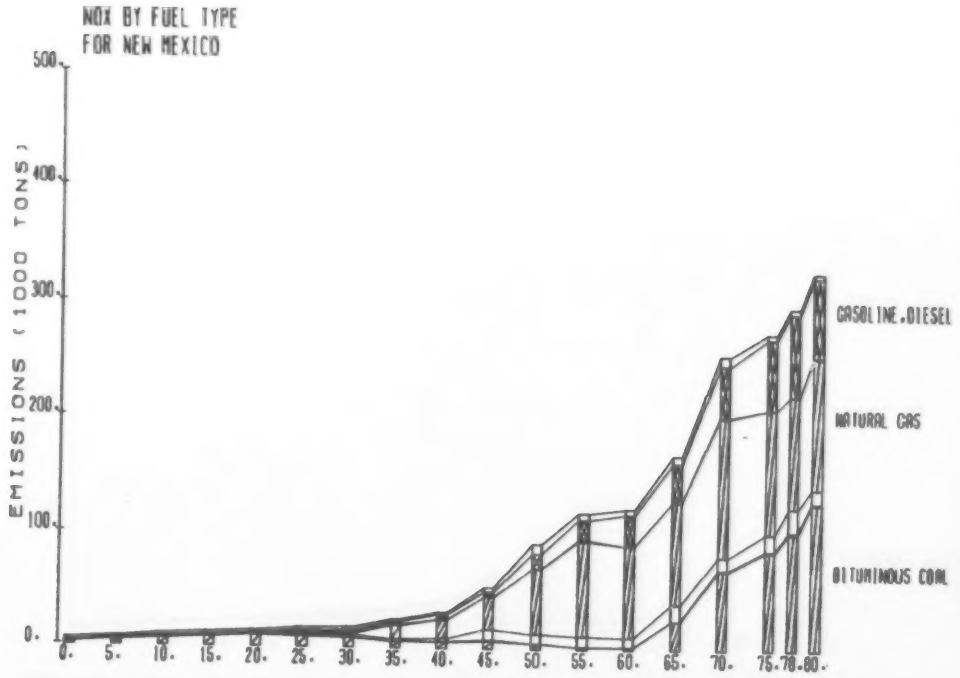


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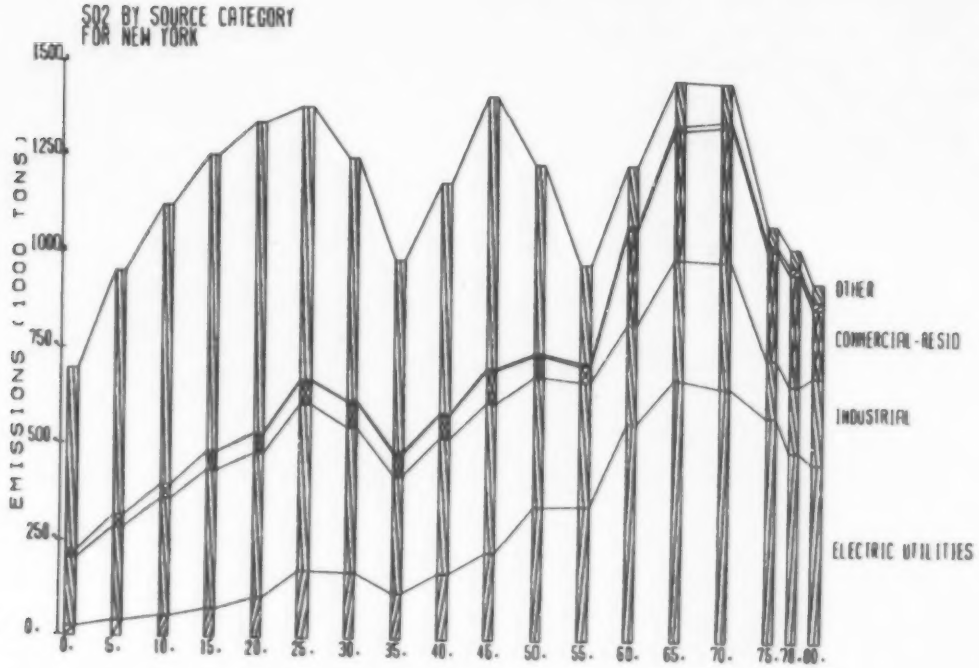


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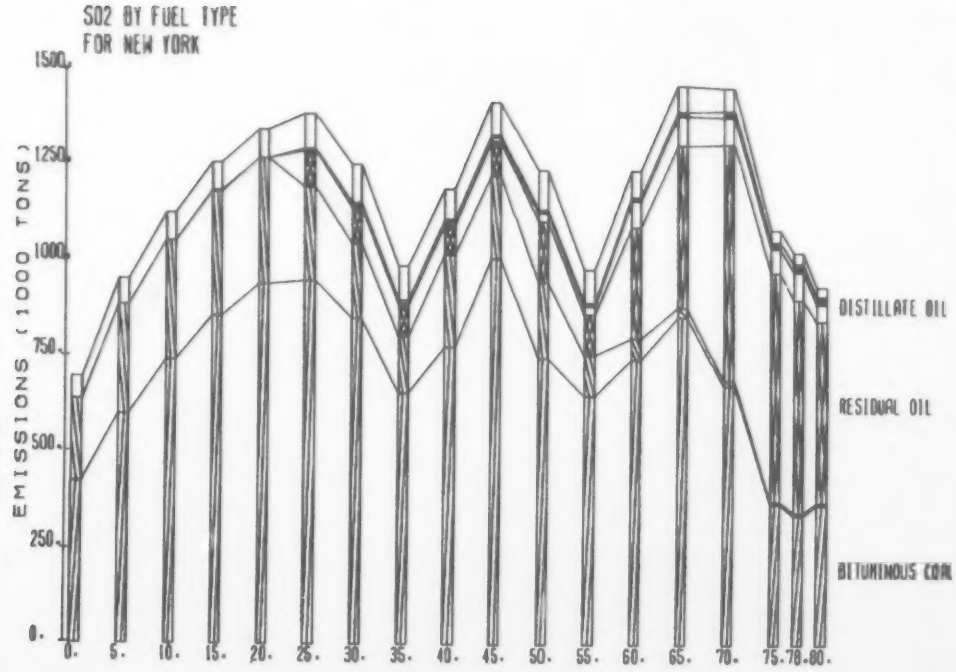


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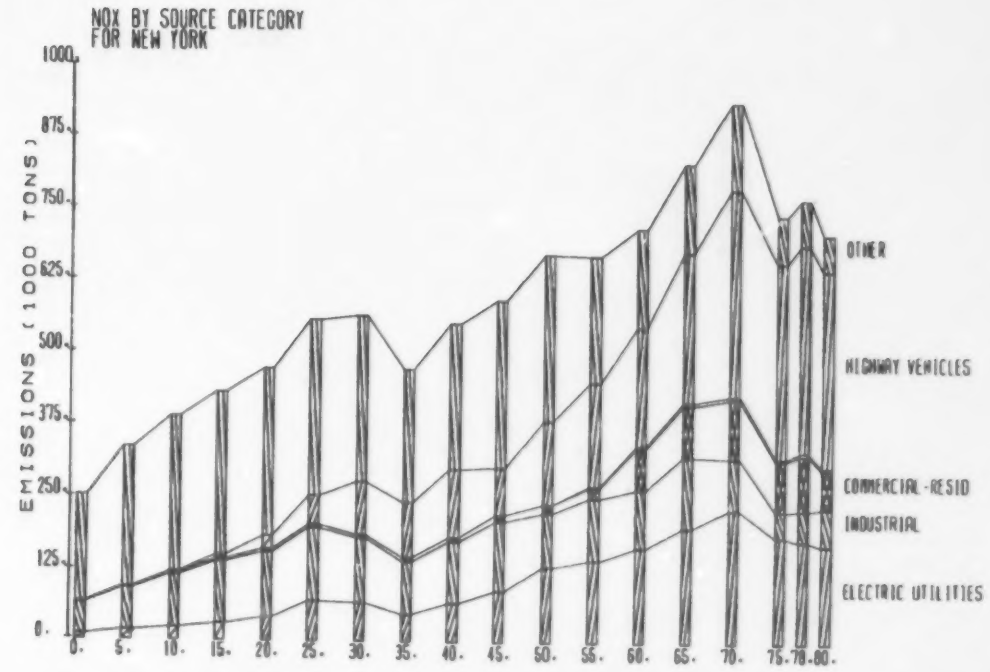


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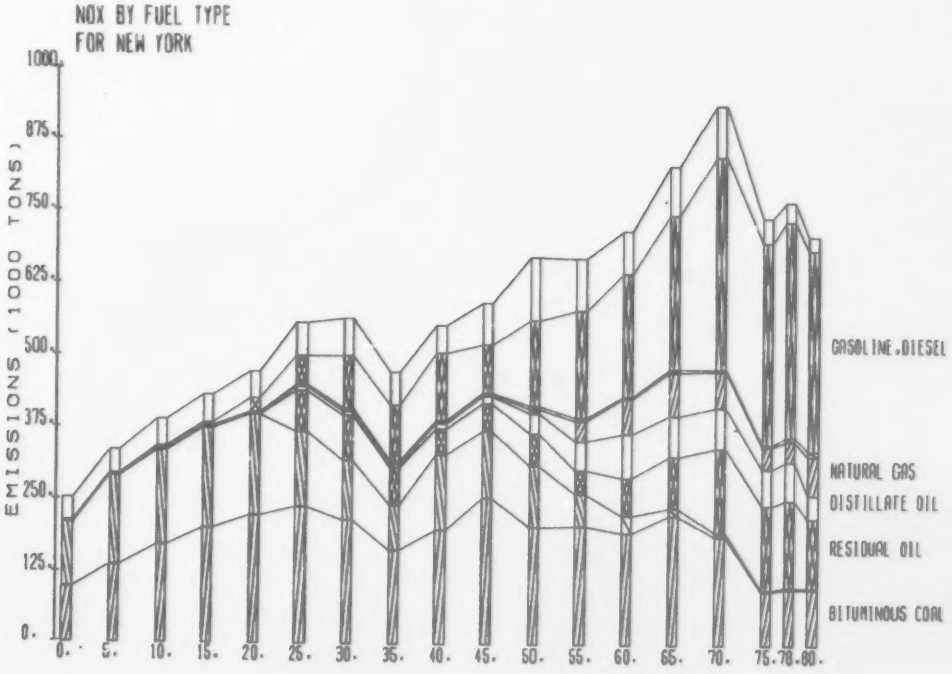


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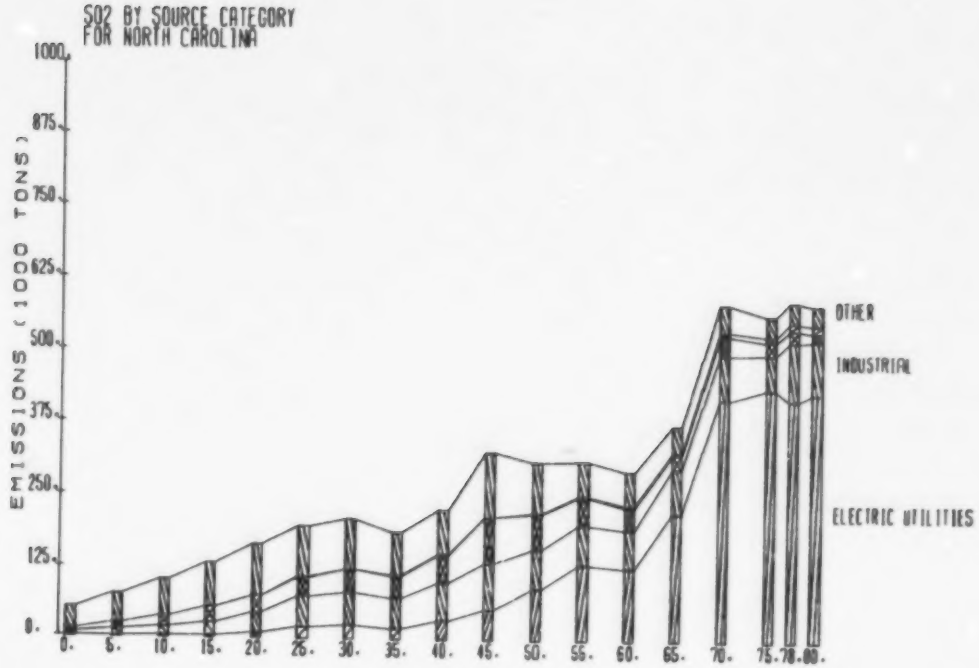
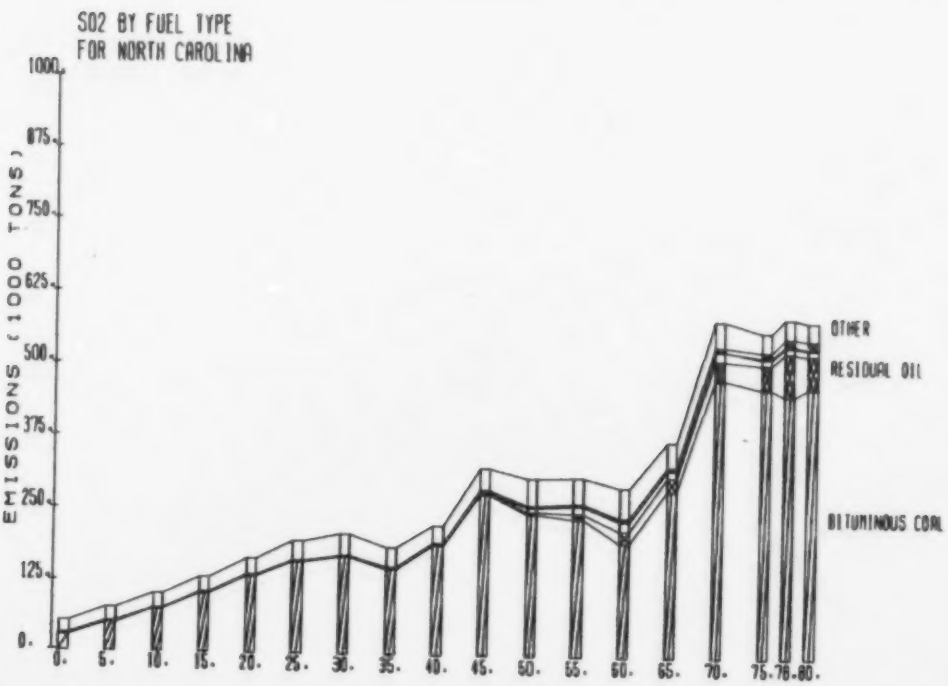



Figure 1.

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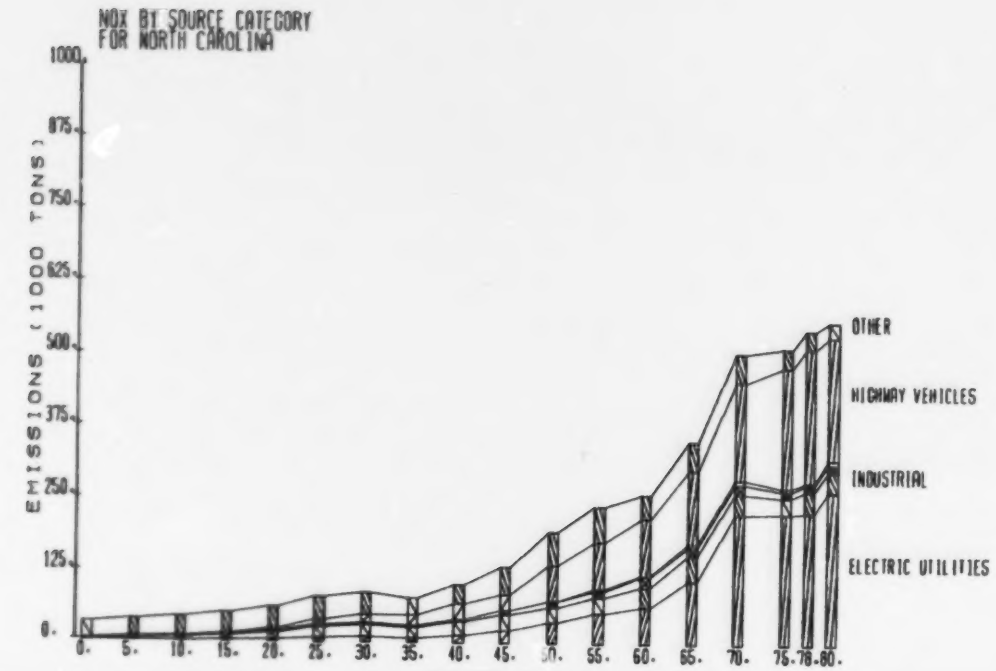


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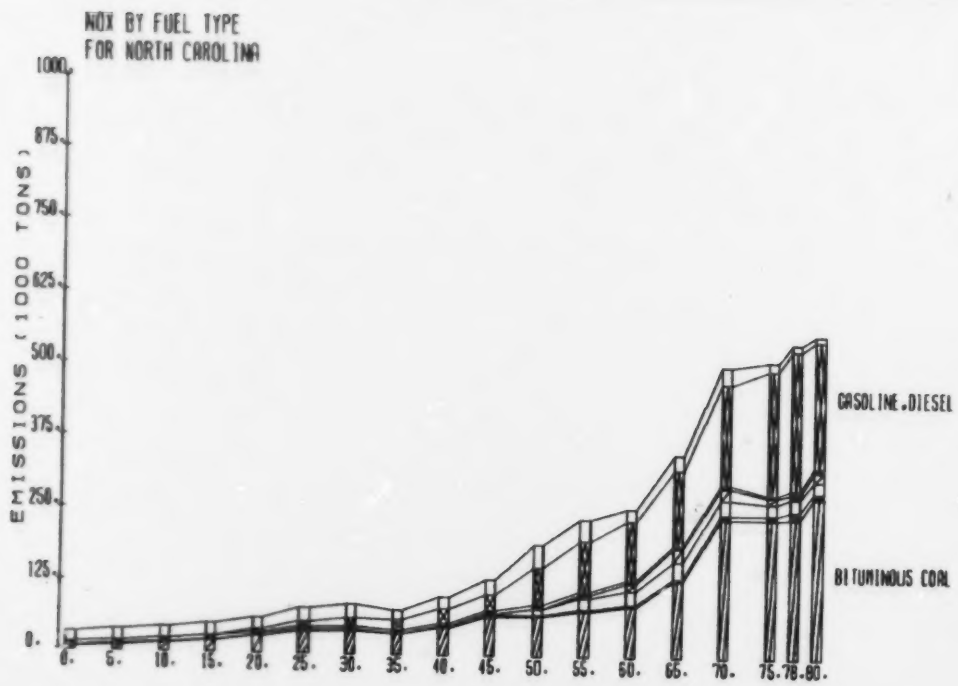
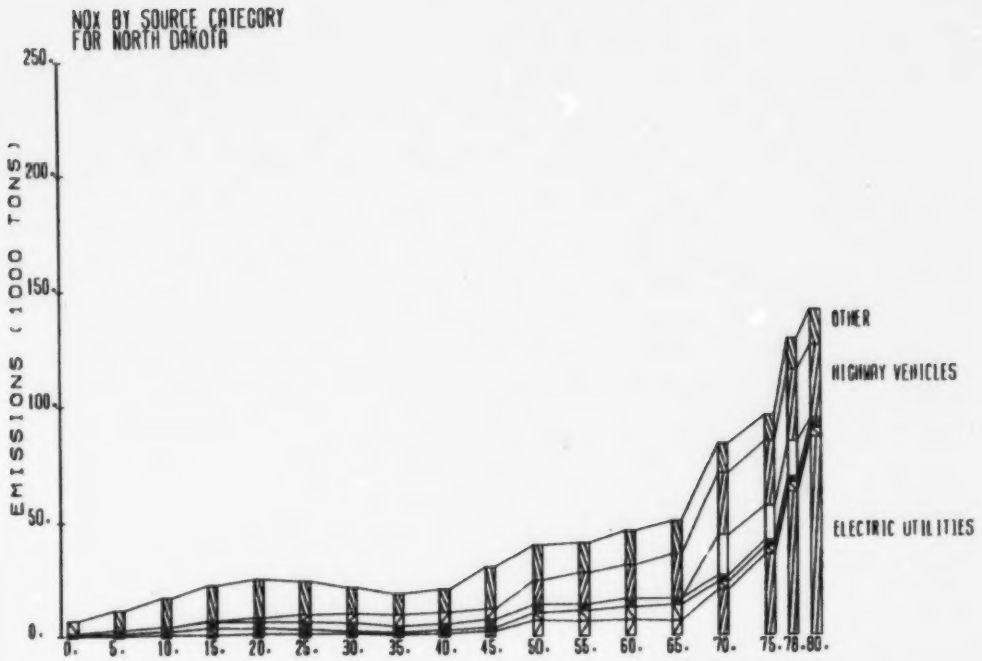



Figure 4.

Figure 1.

Figure 2.

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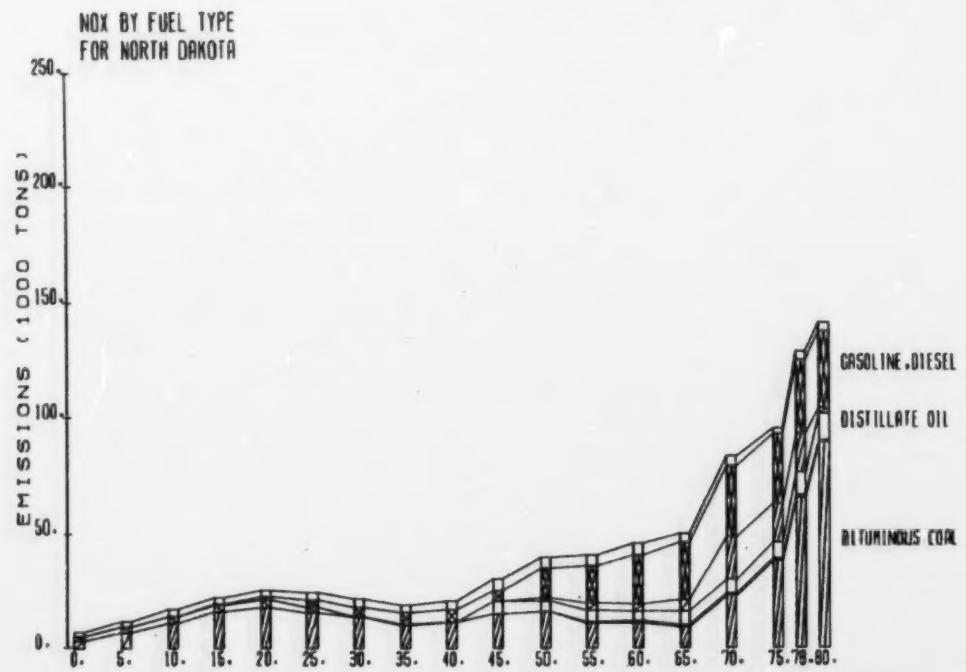


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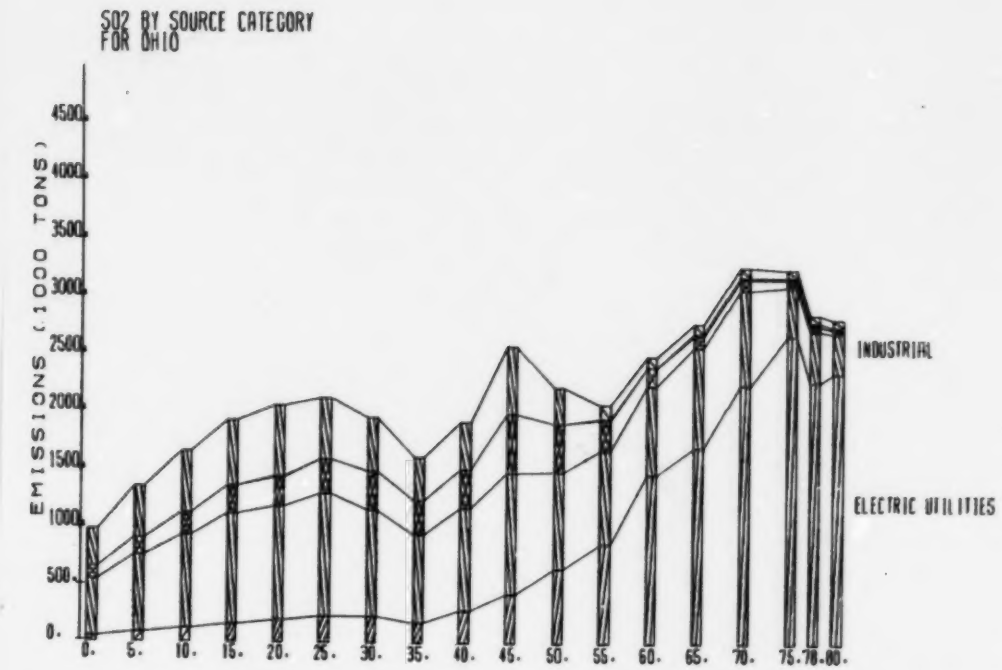


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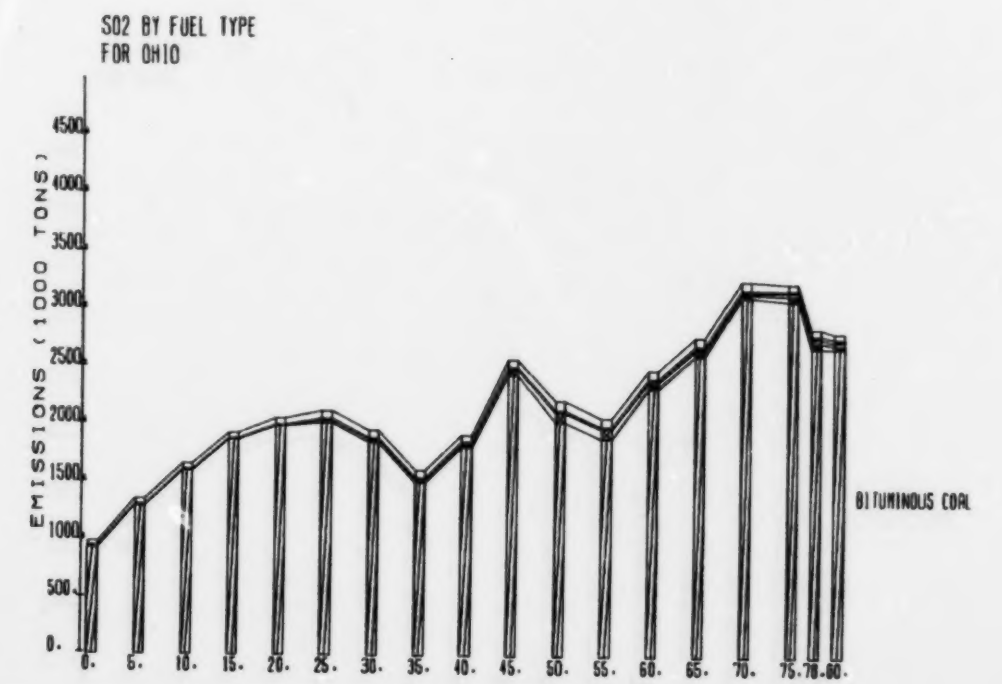


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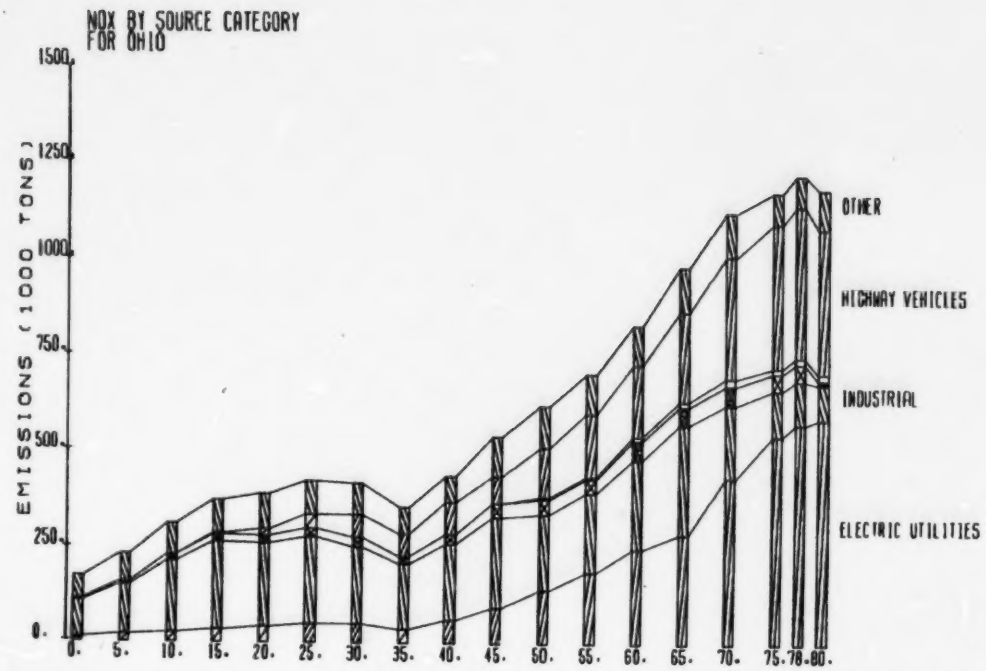


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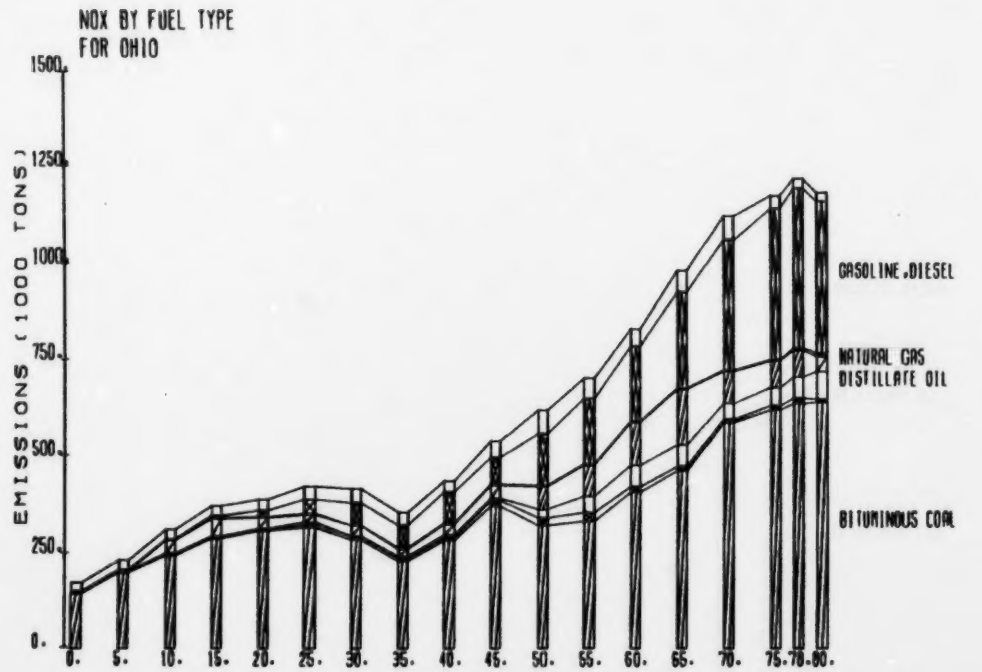


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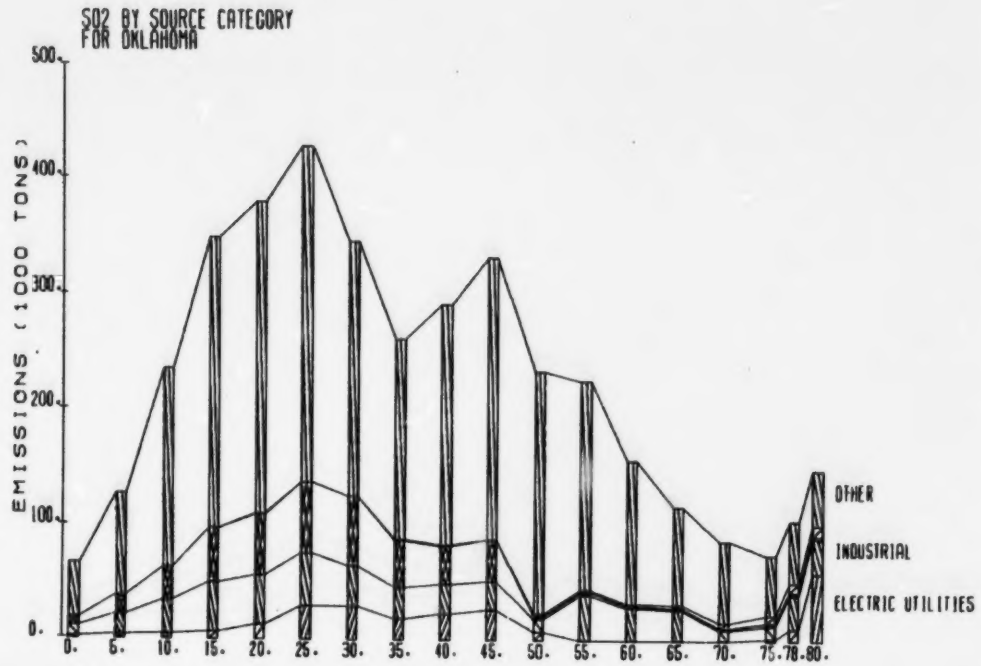
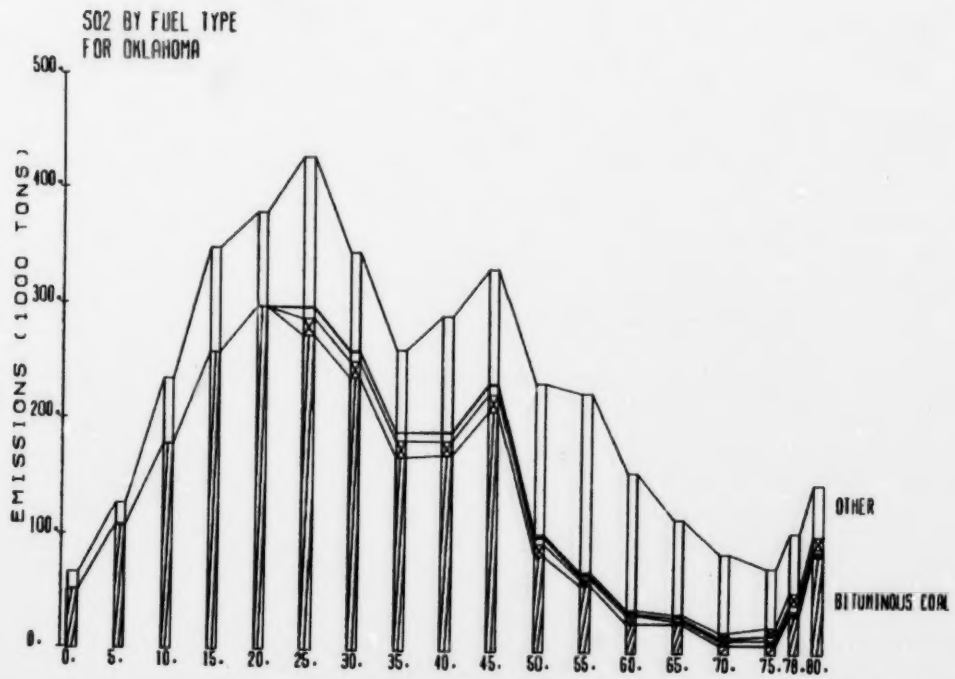



Figure 1.

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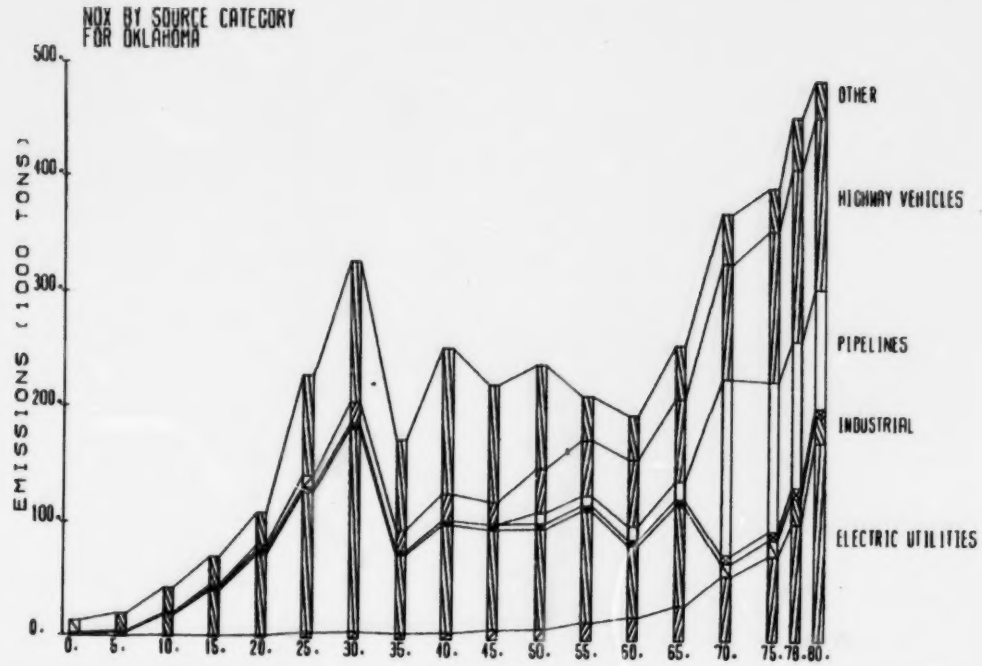


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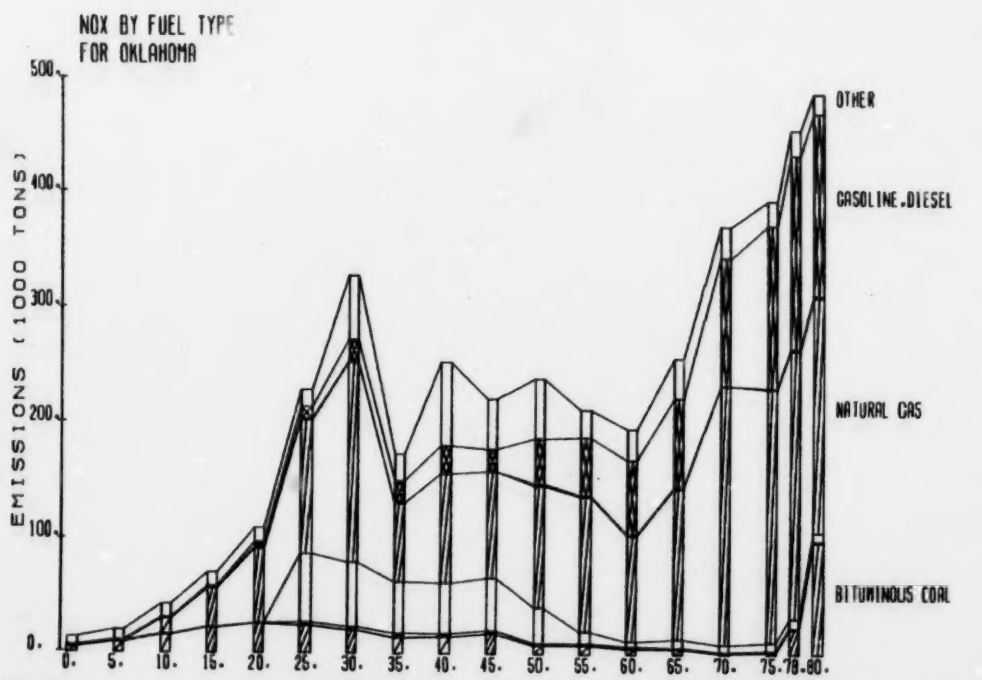


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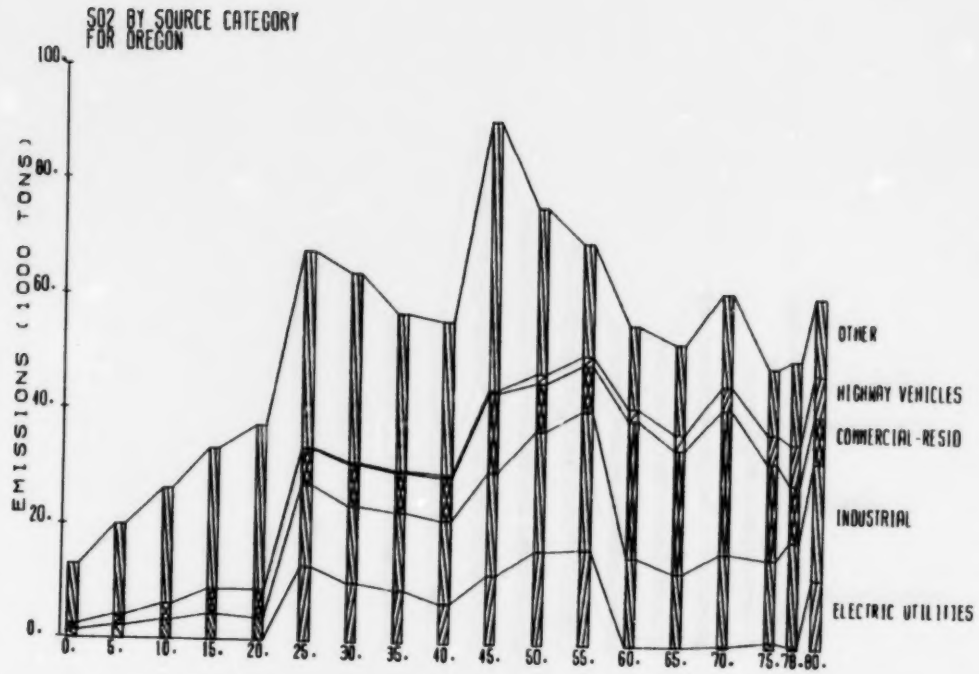


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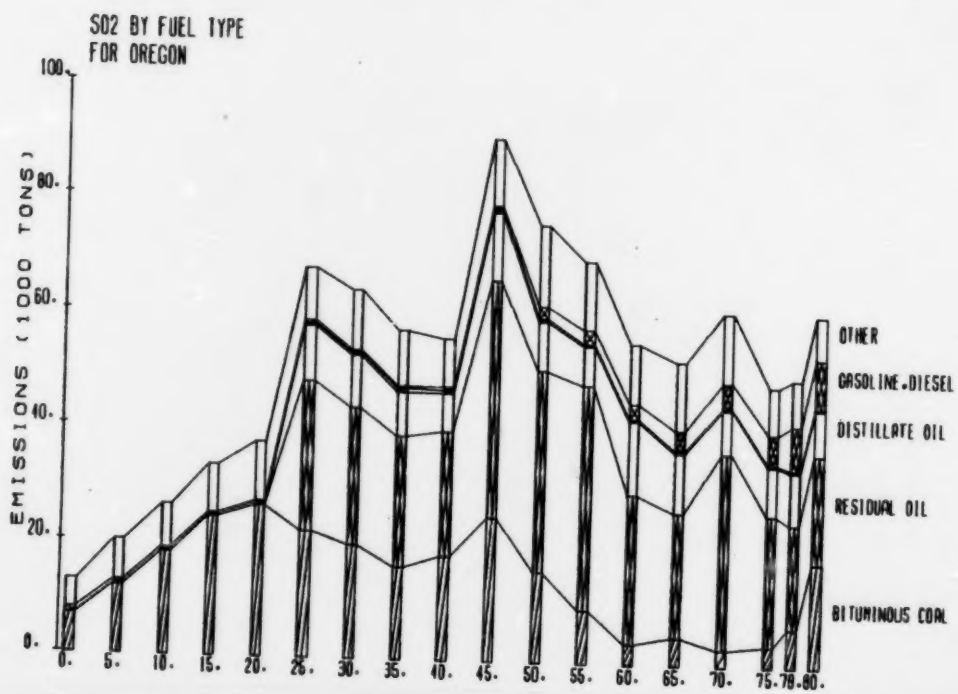


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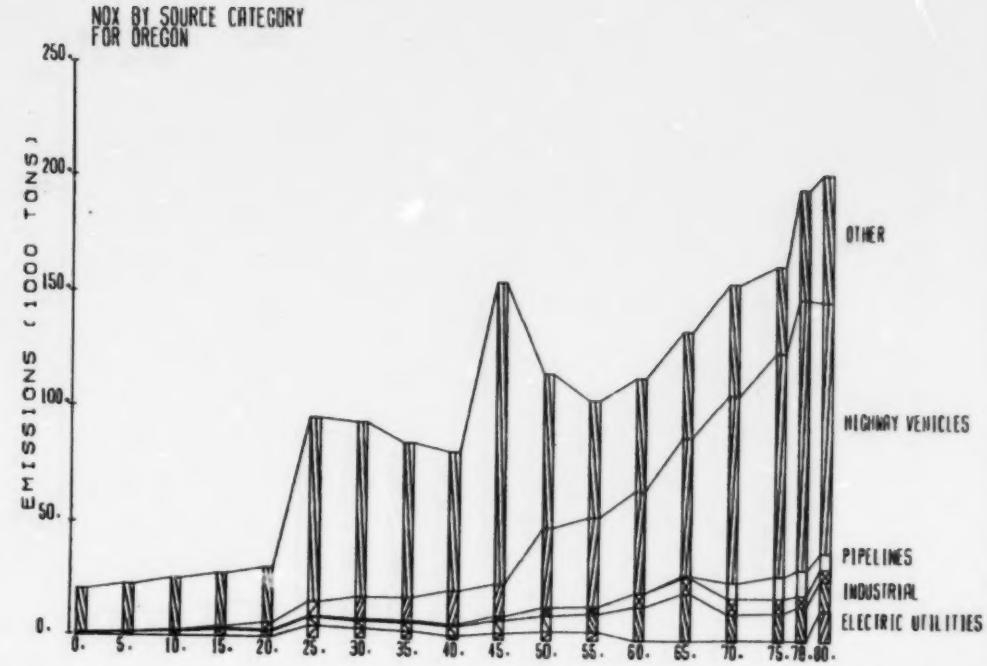


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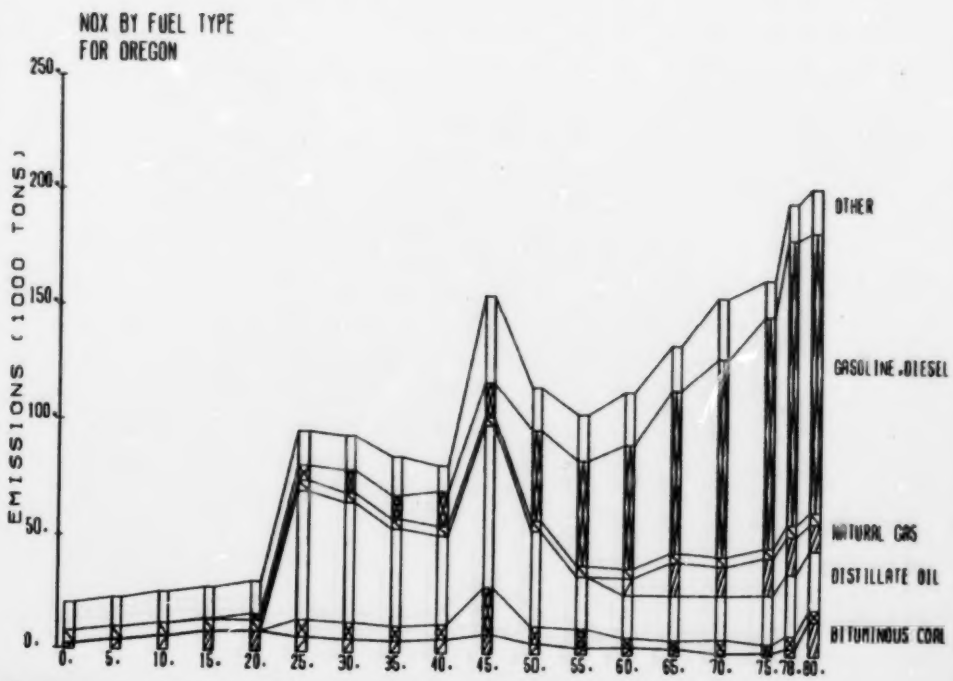


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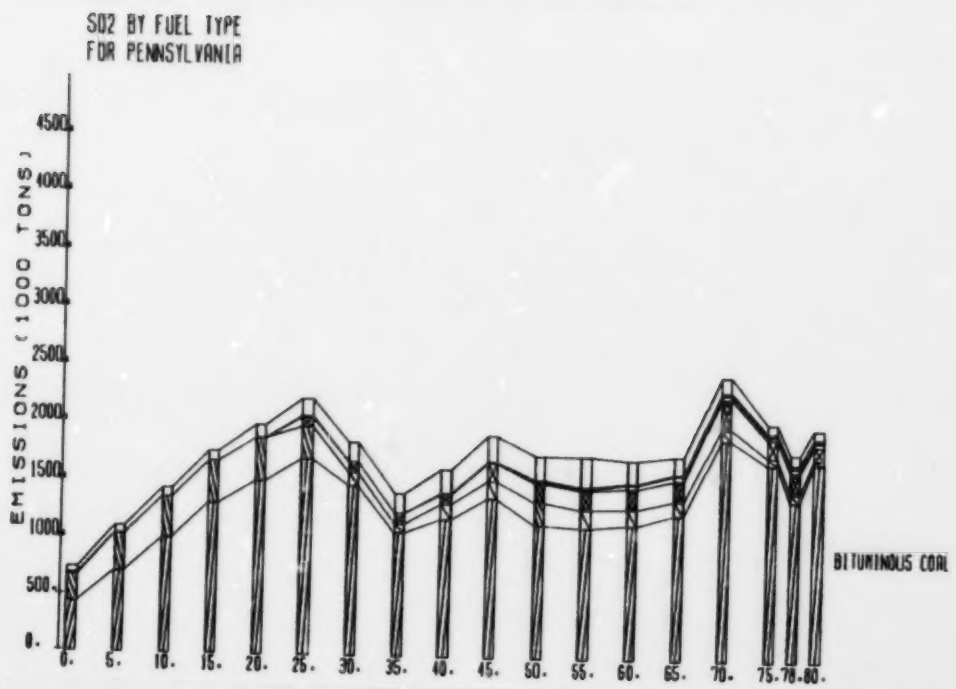


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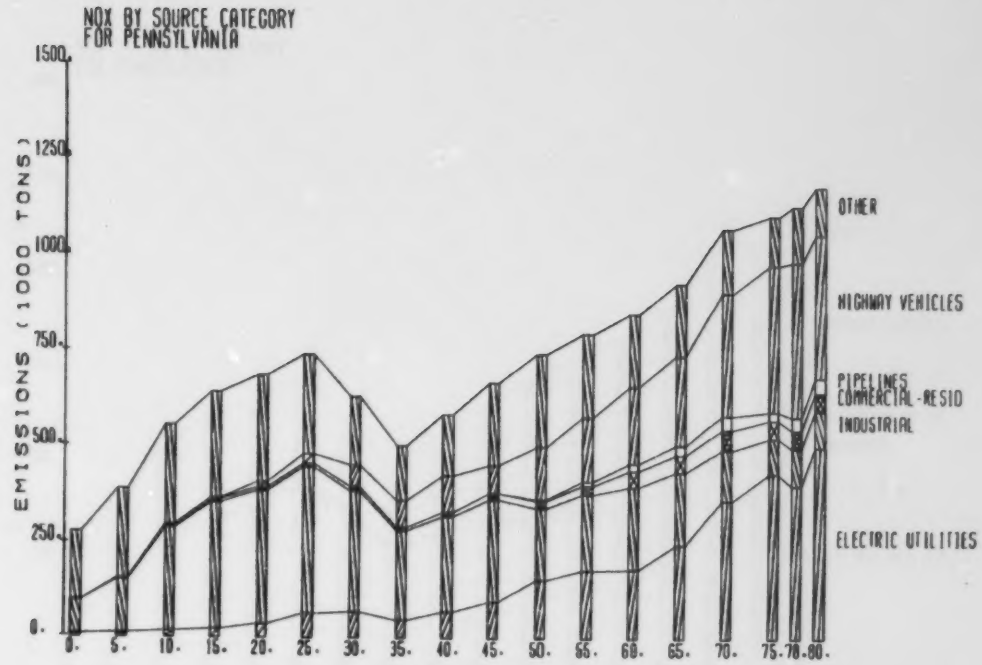


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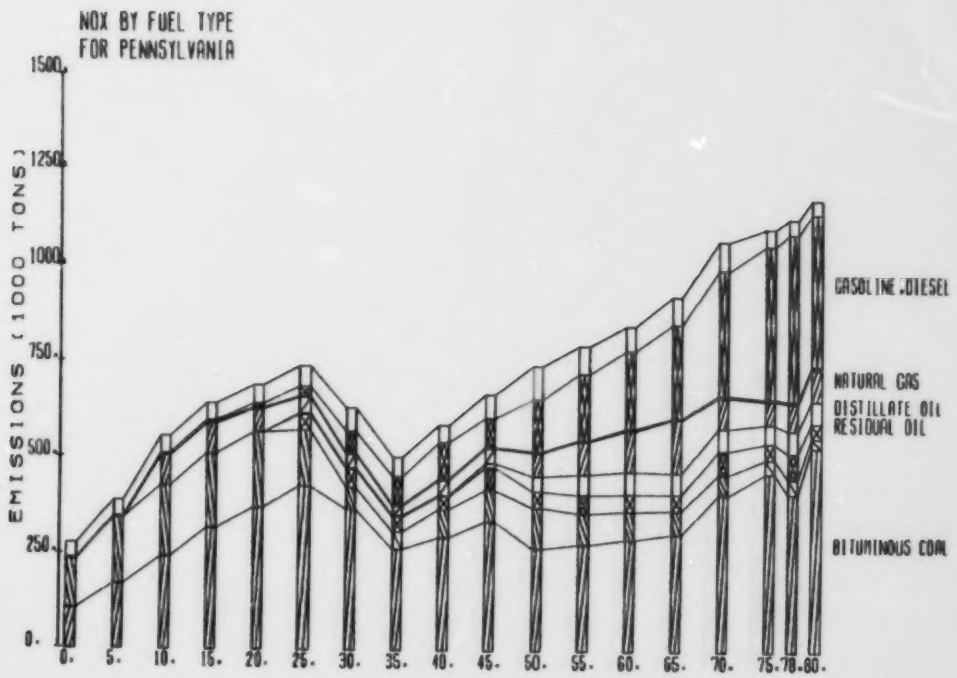


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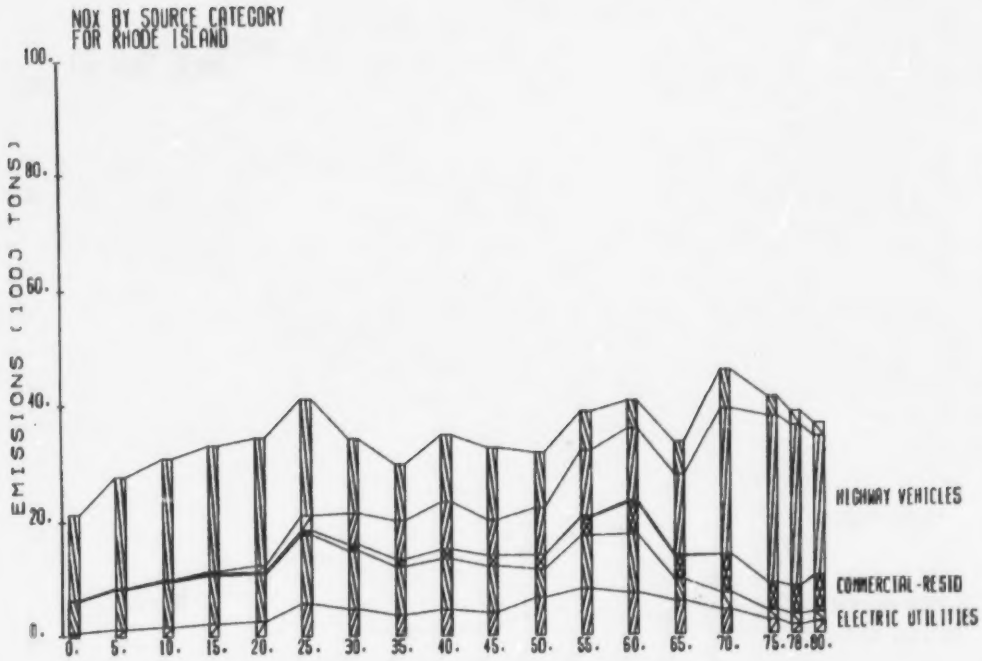


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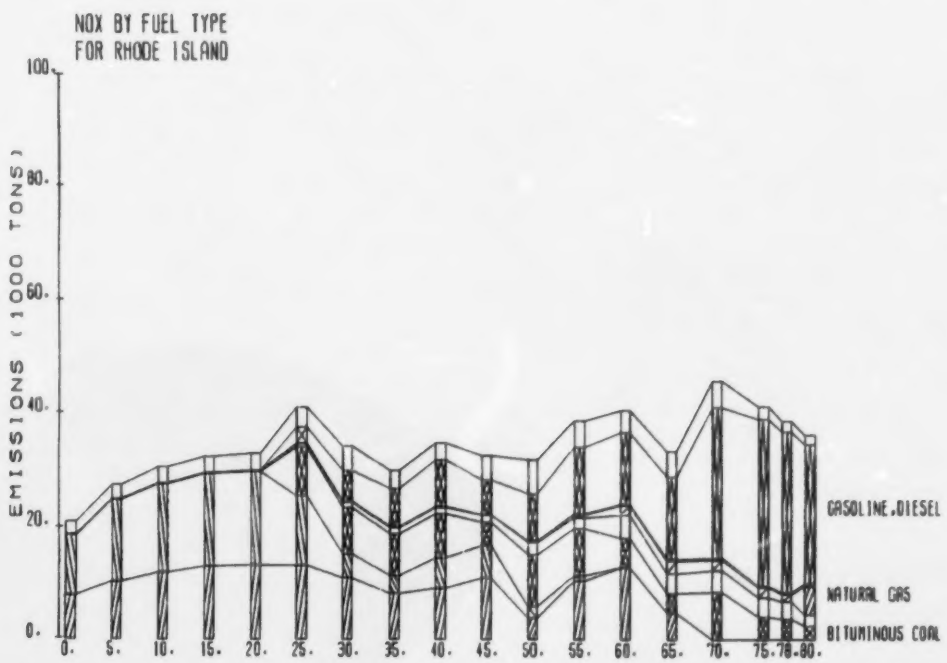


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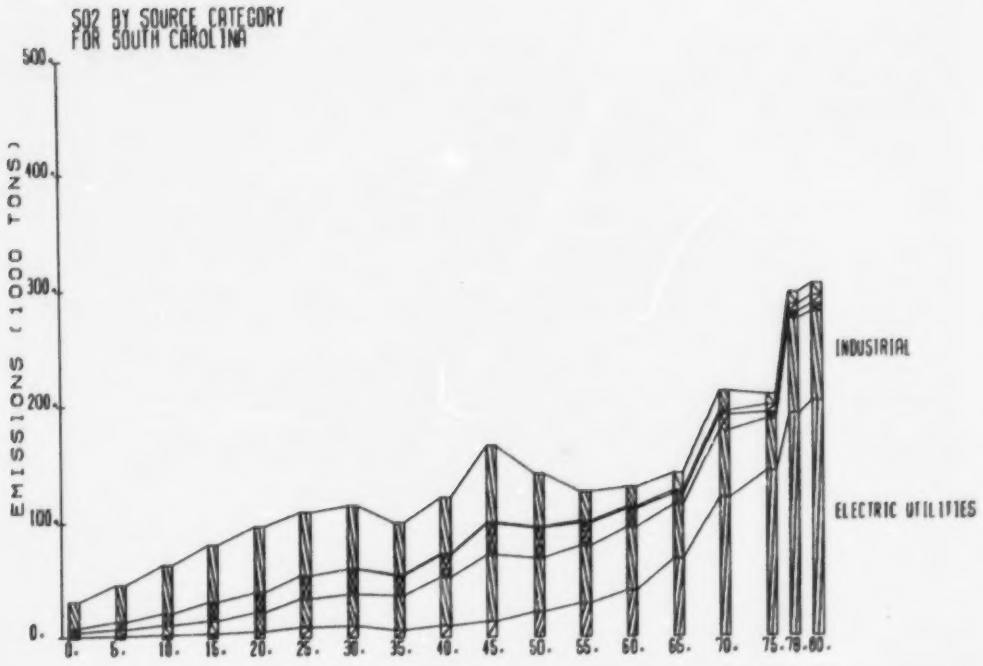


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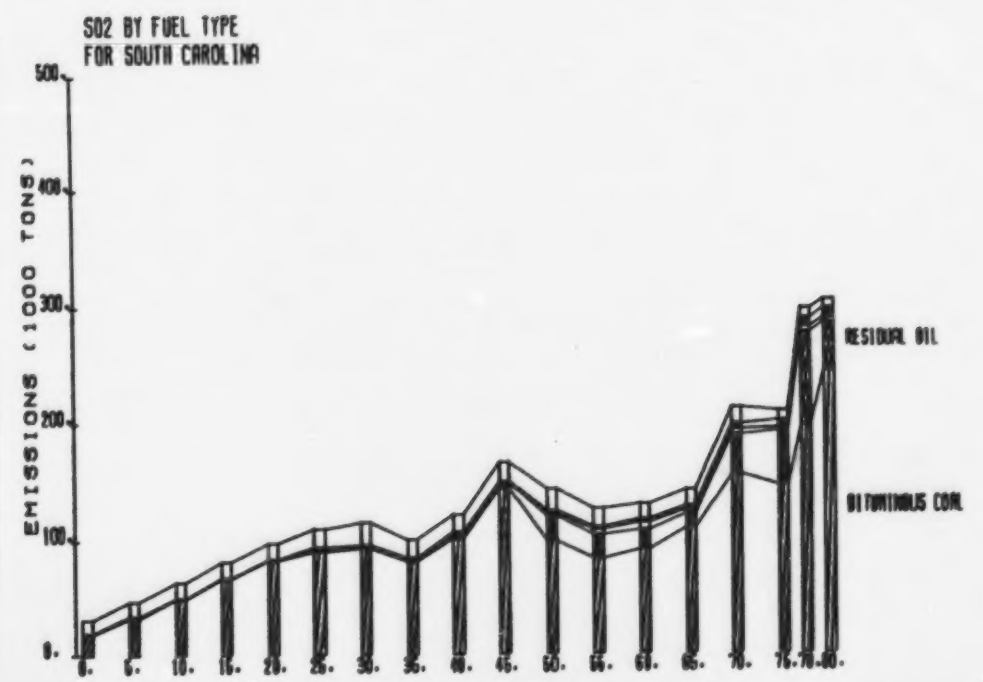


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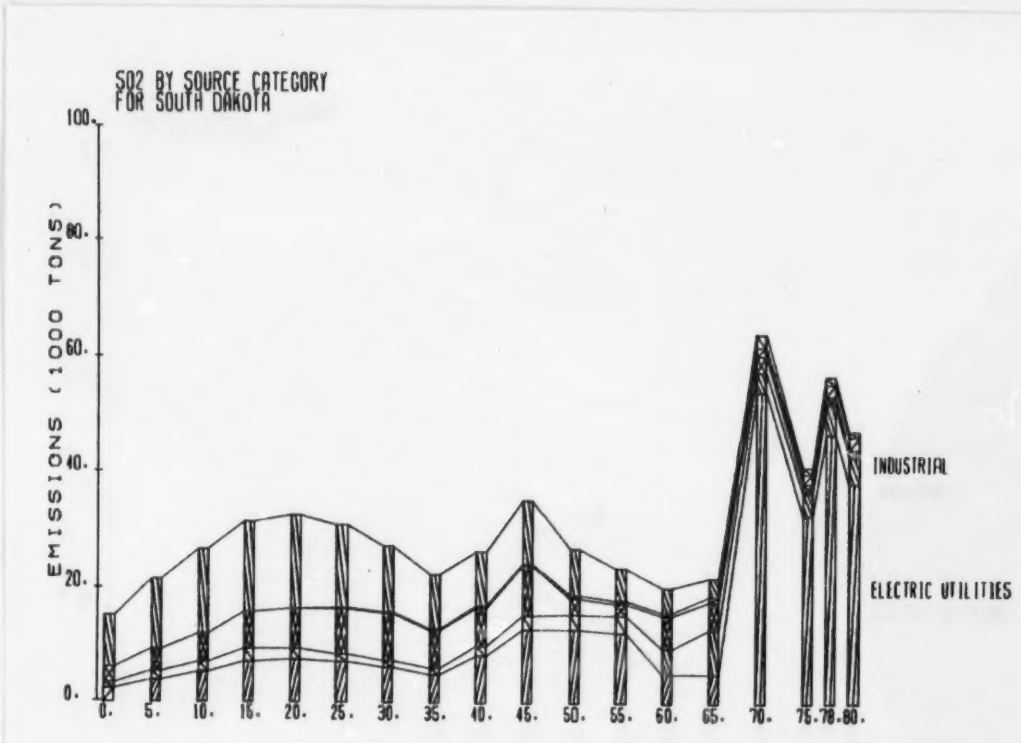


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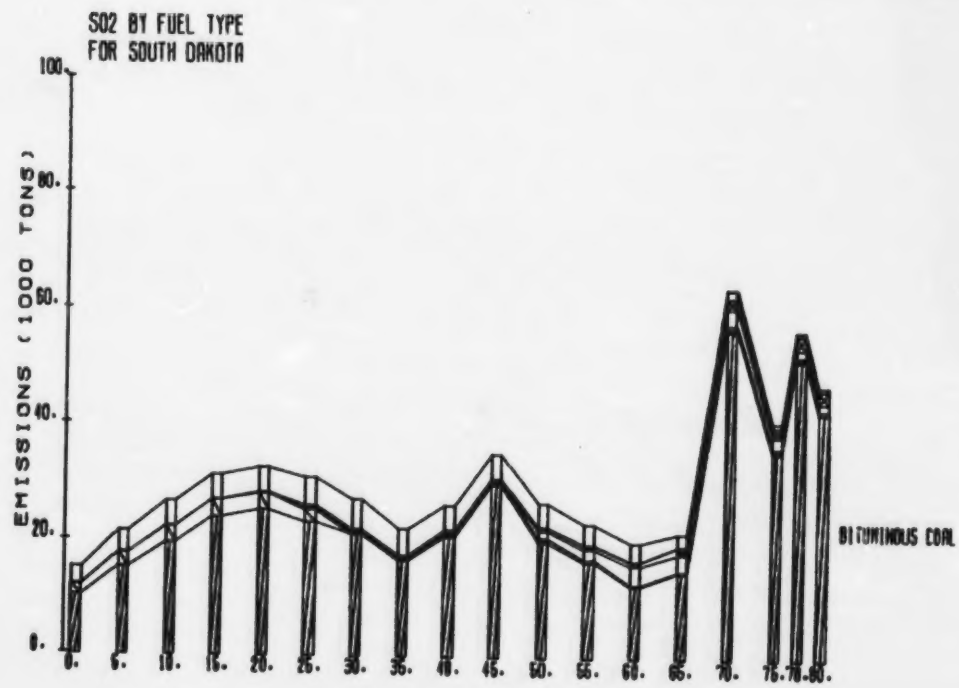


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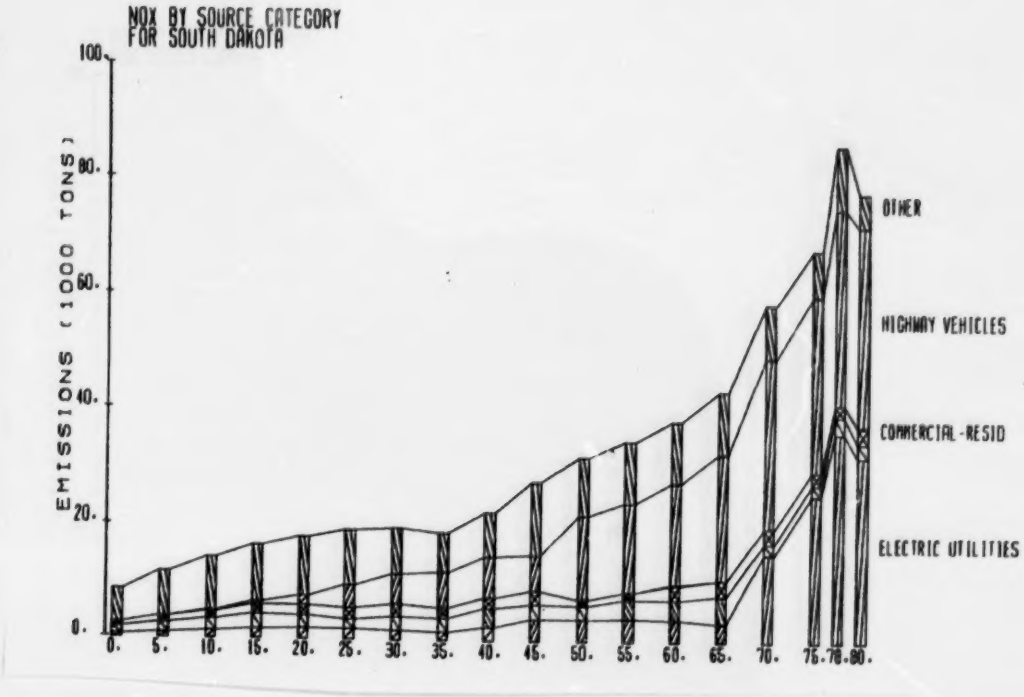


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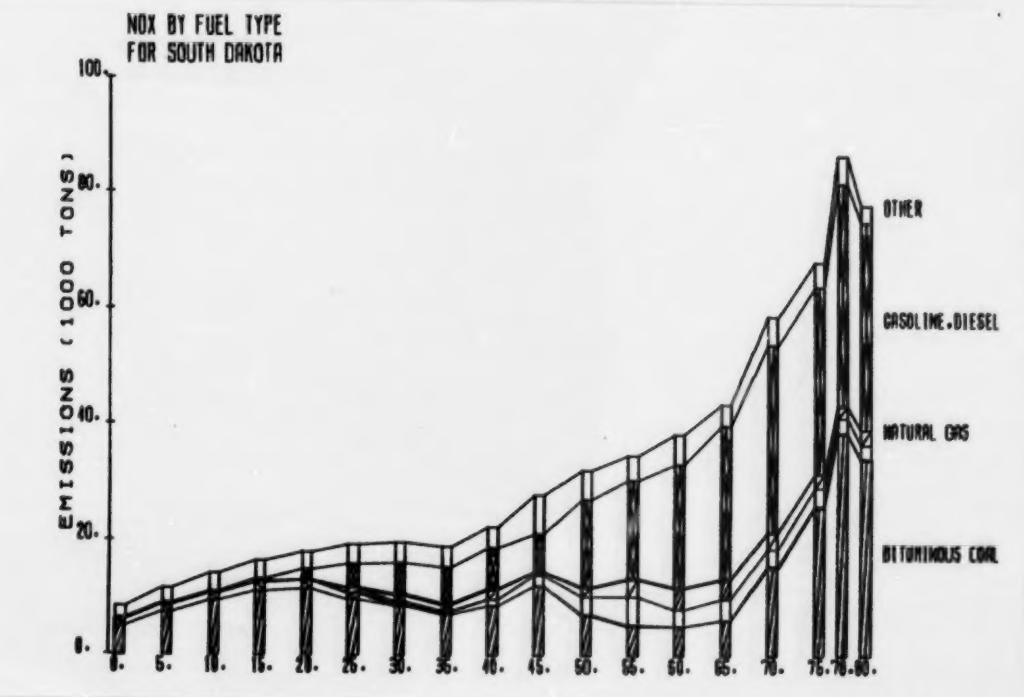


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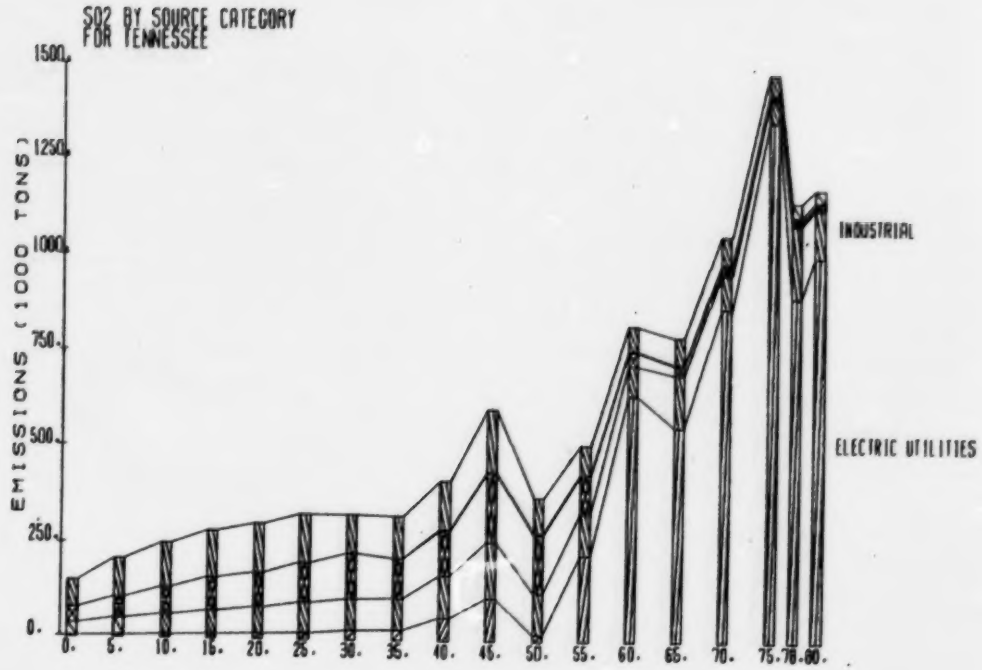


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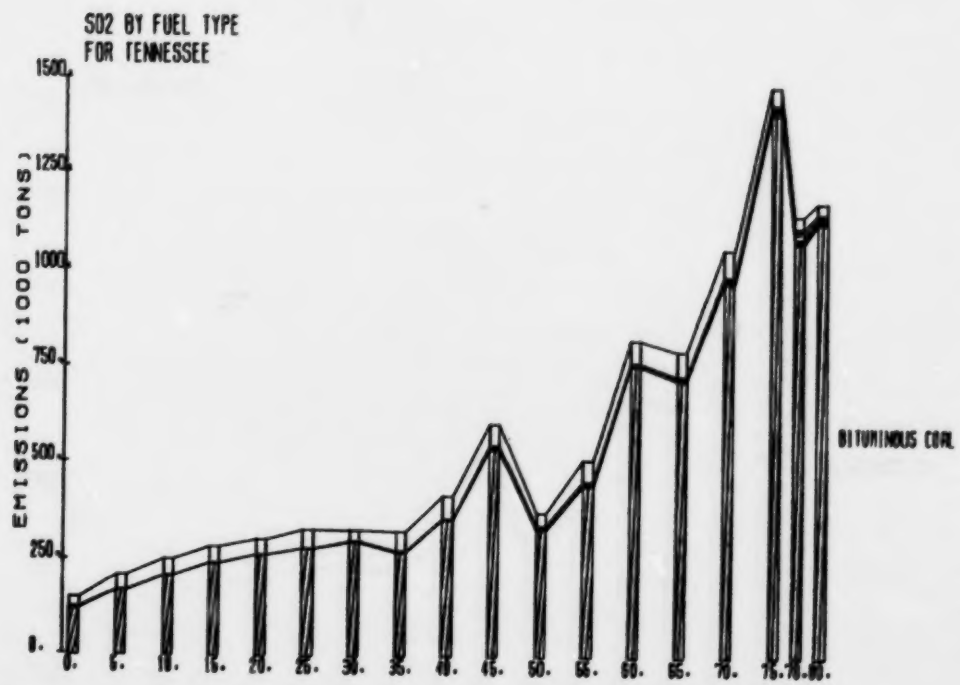


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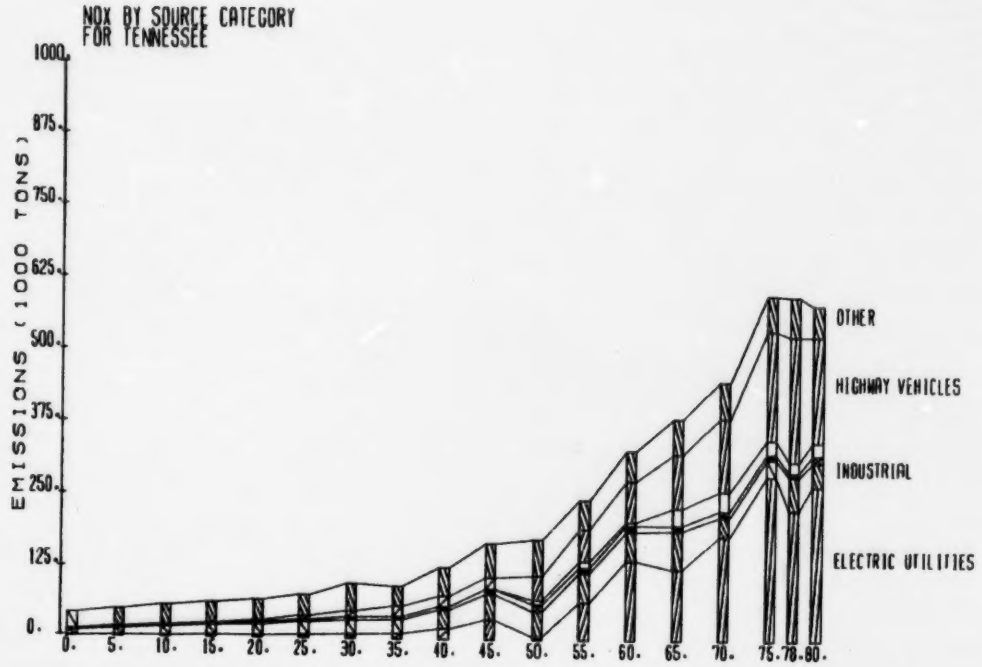


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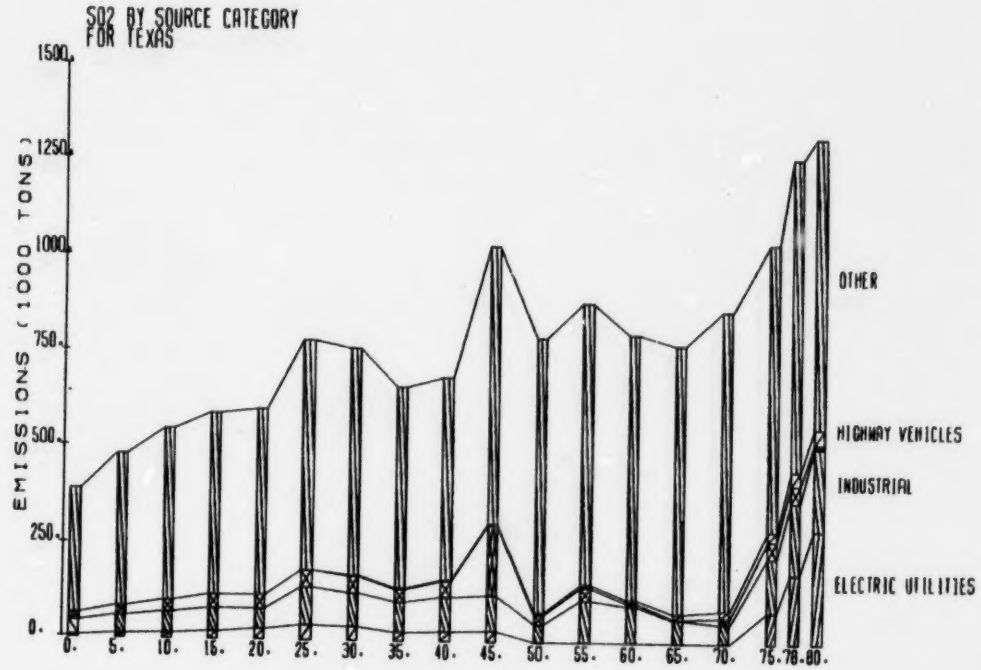


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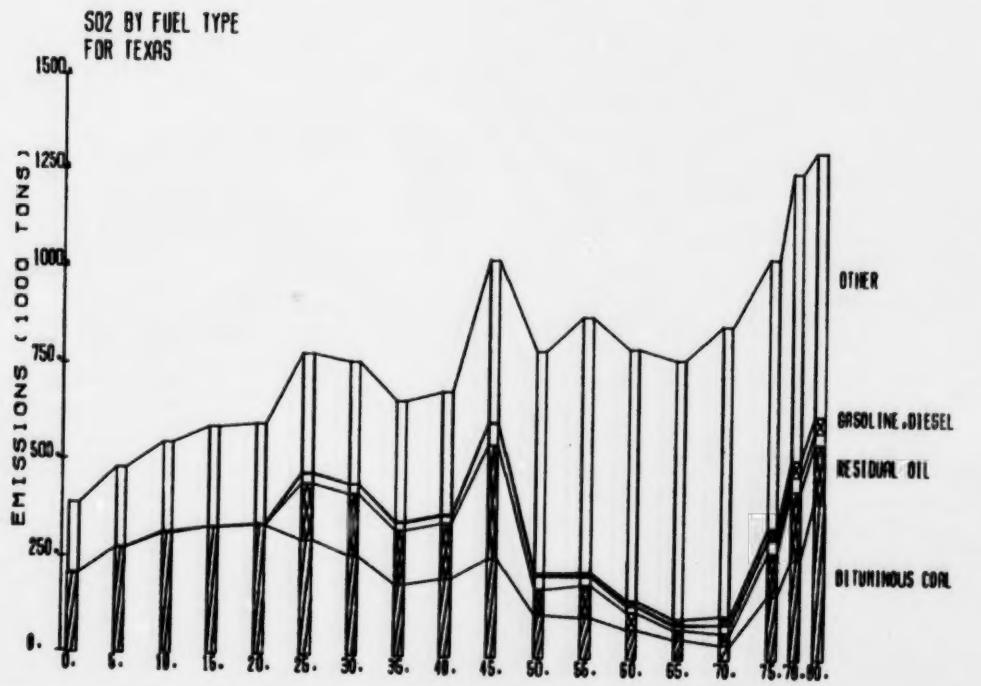


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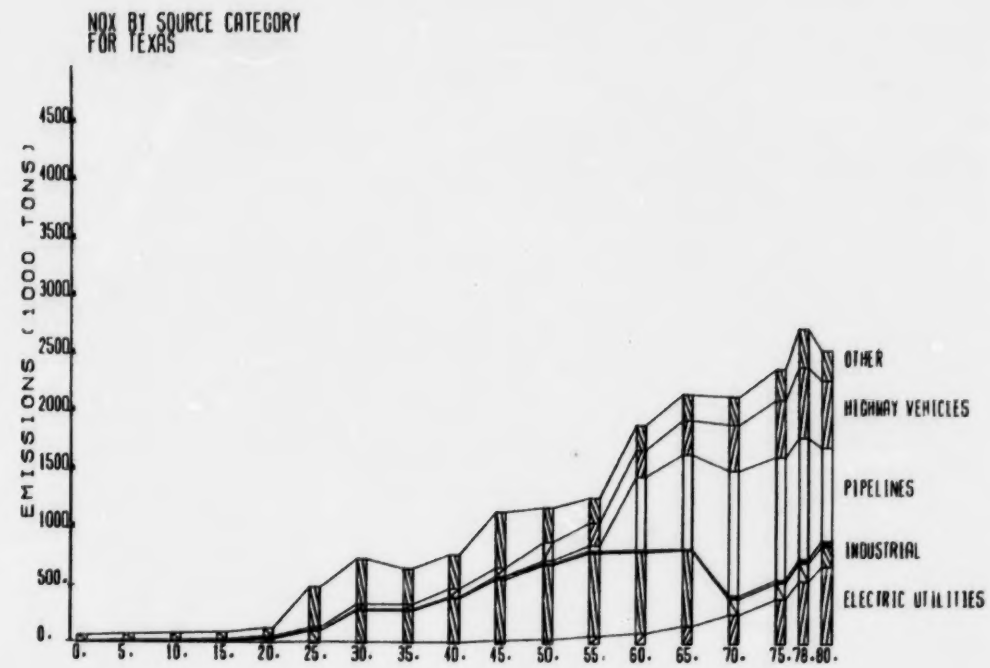


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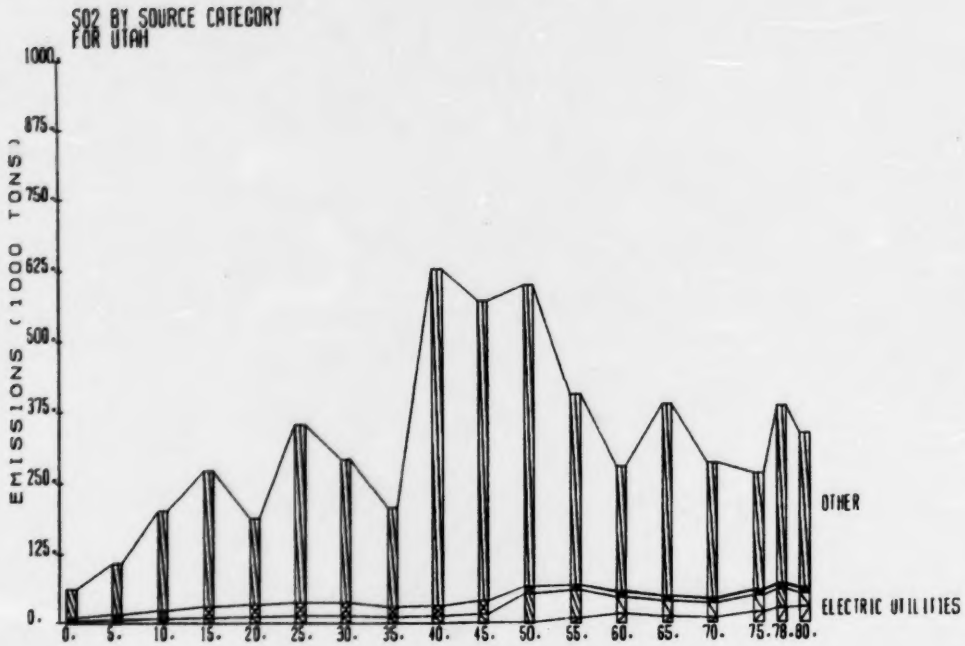


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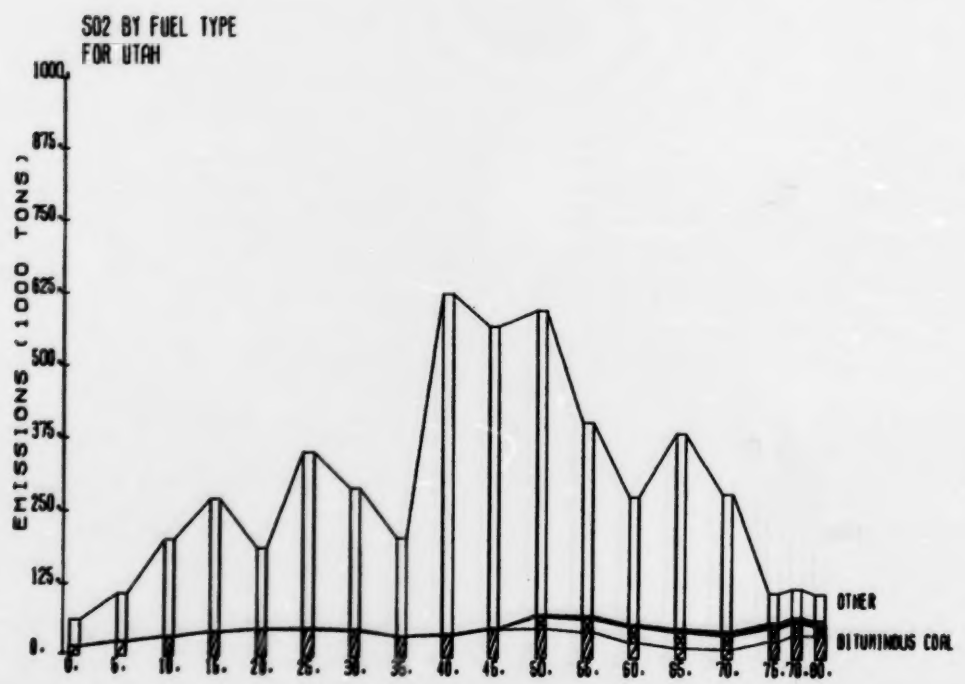


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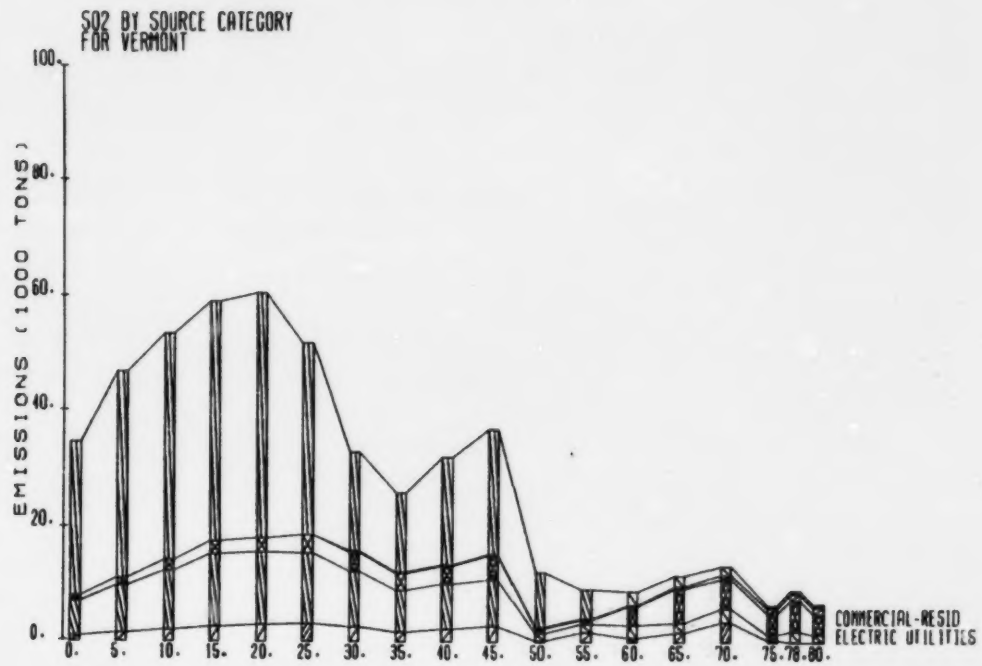


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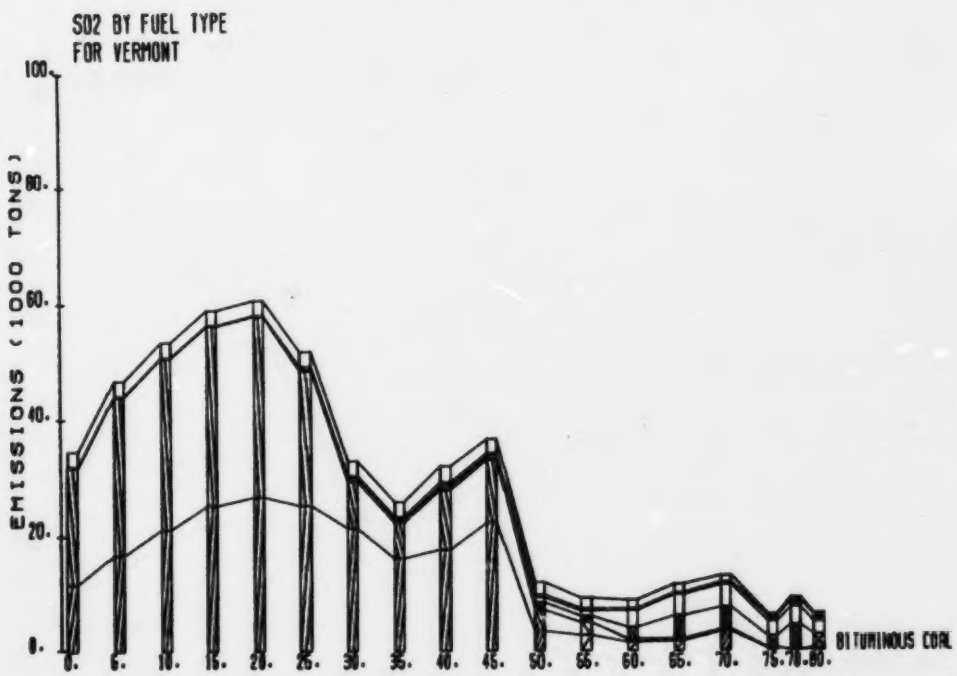


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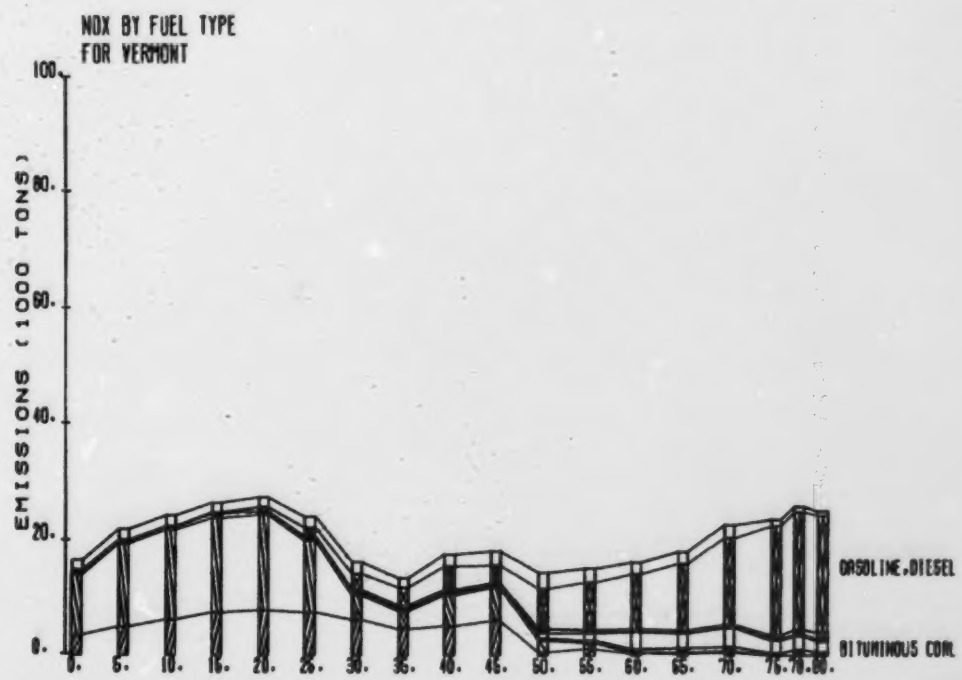


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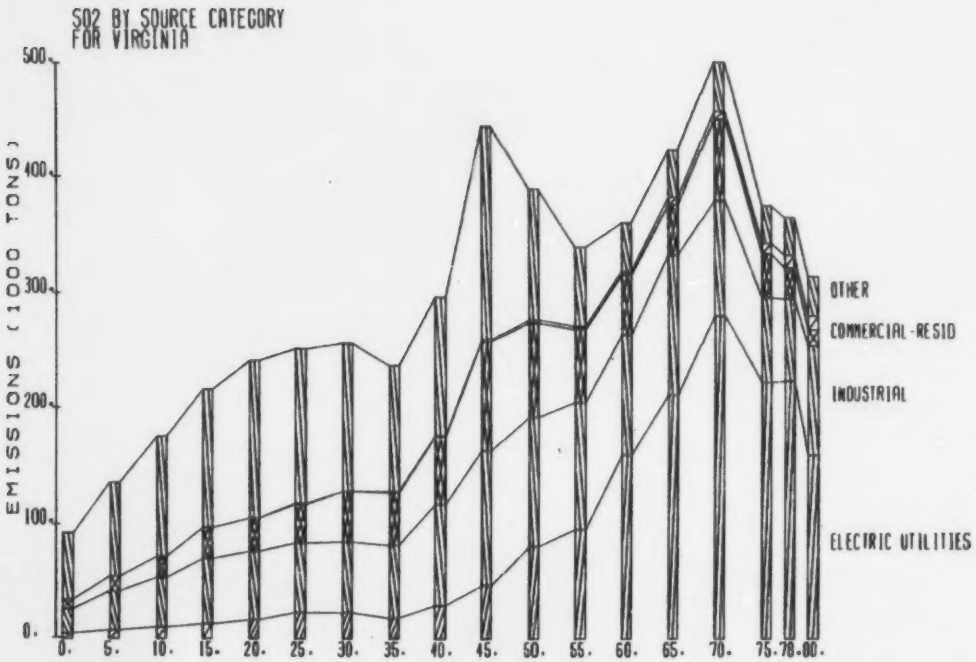


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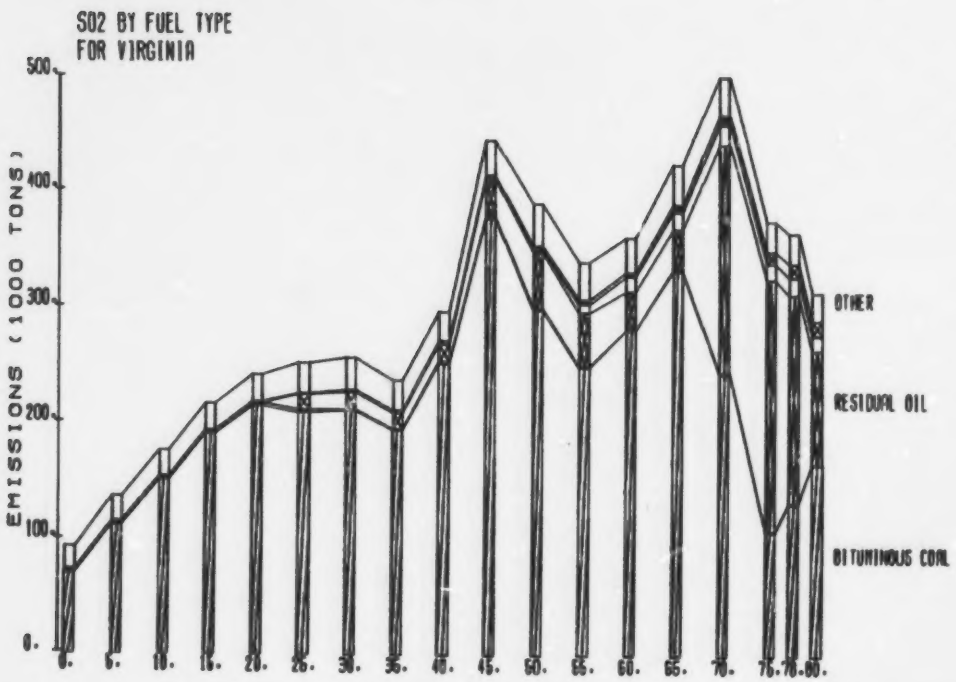


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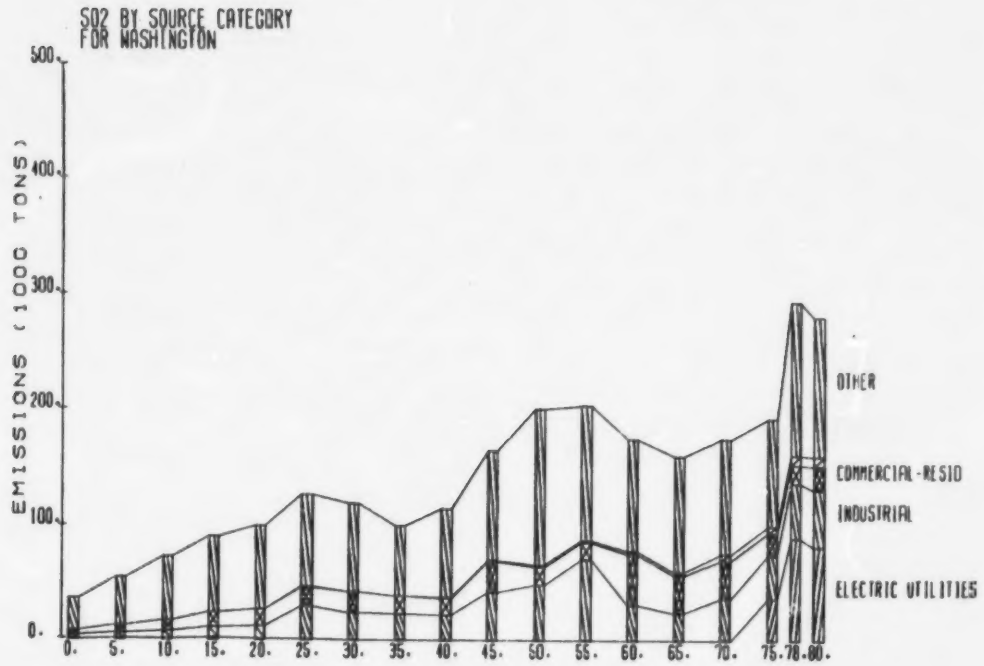


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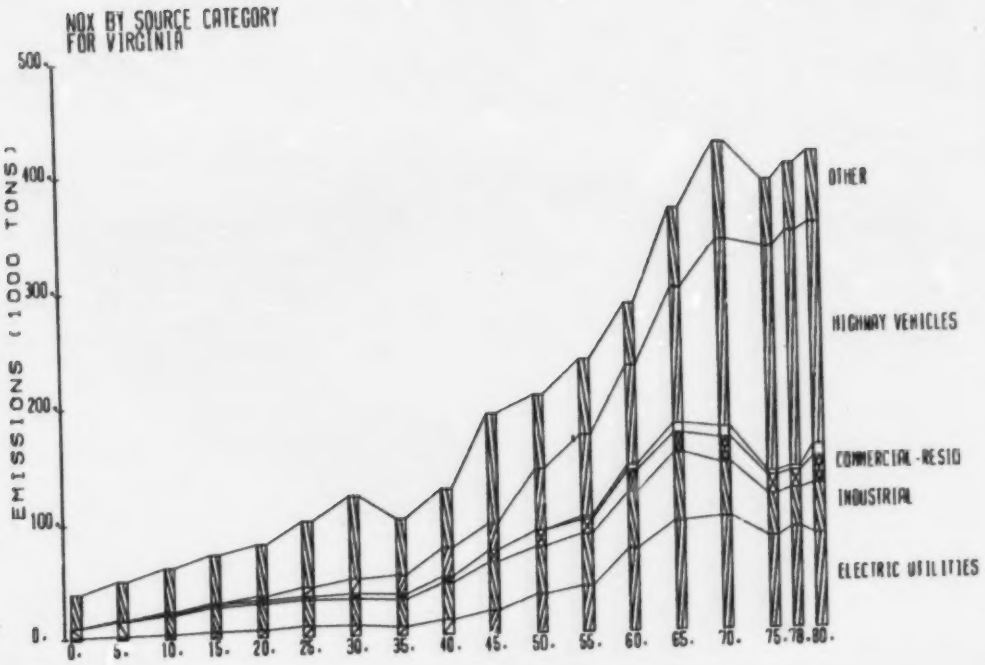


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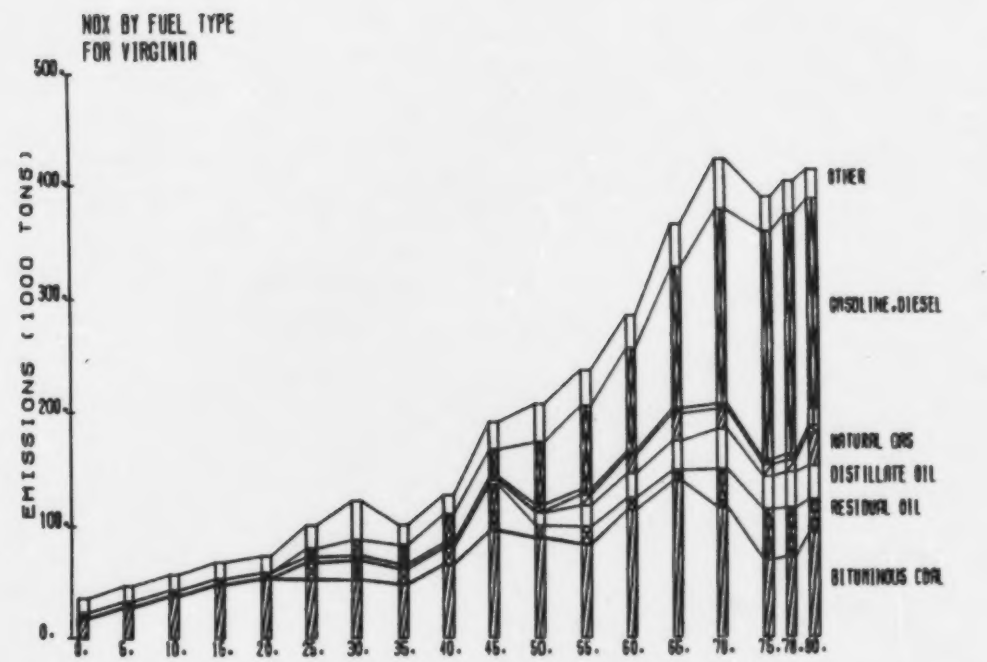


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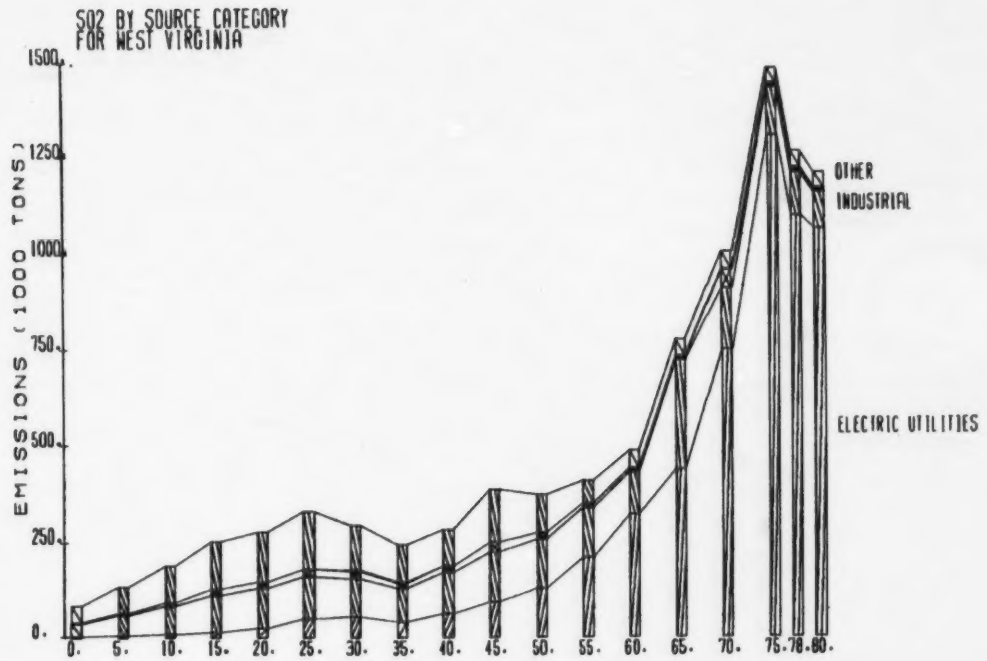


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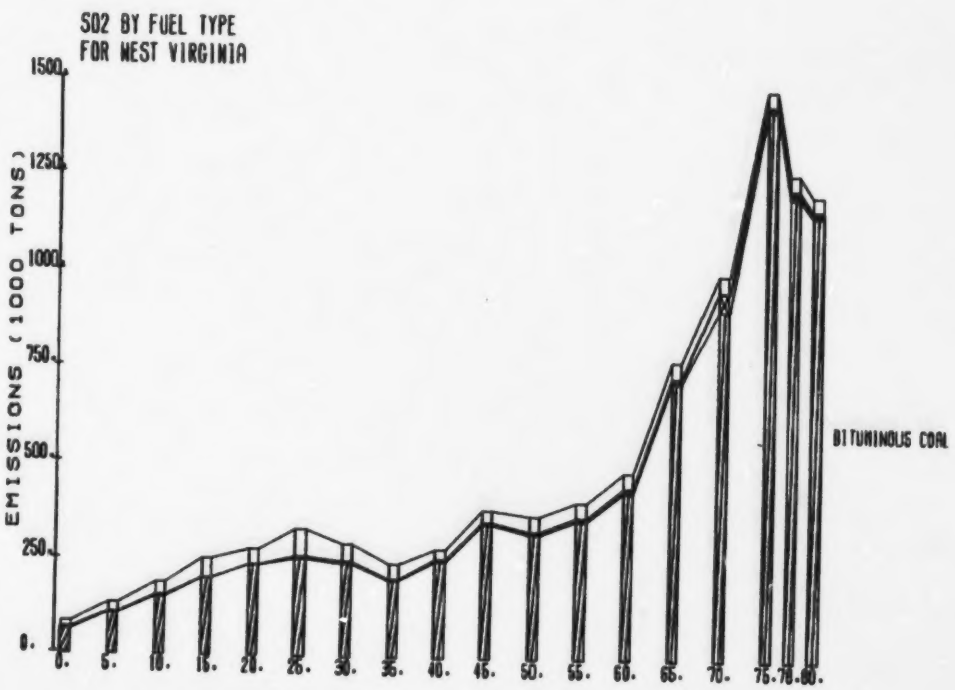


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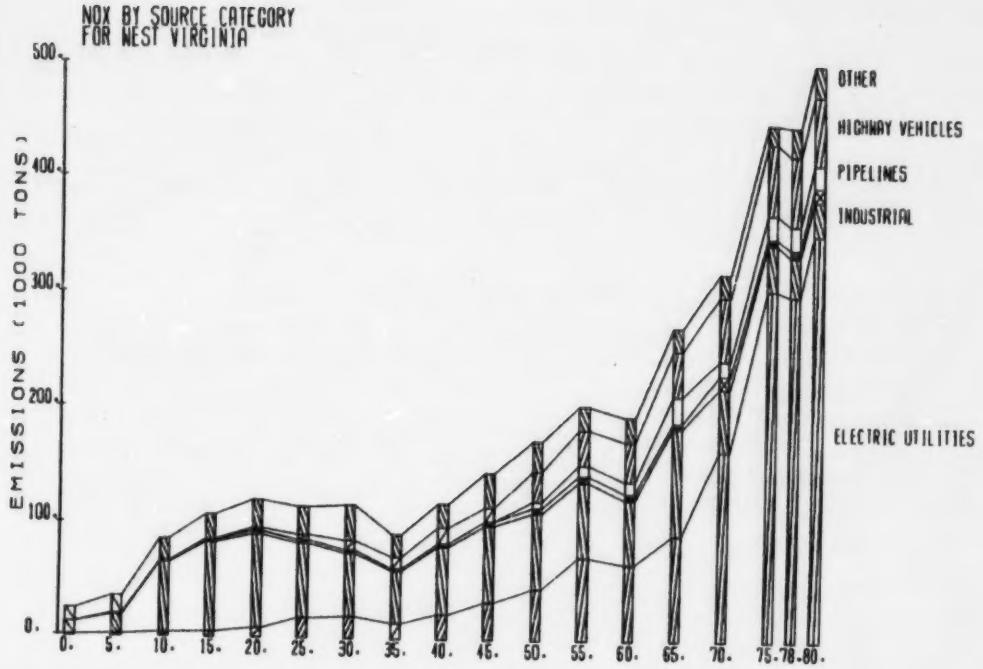


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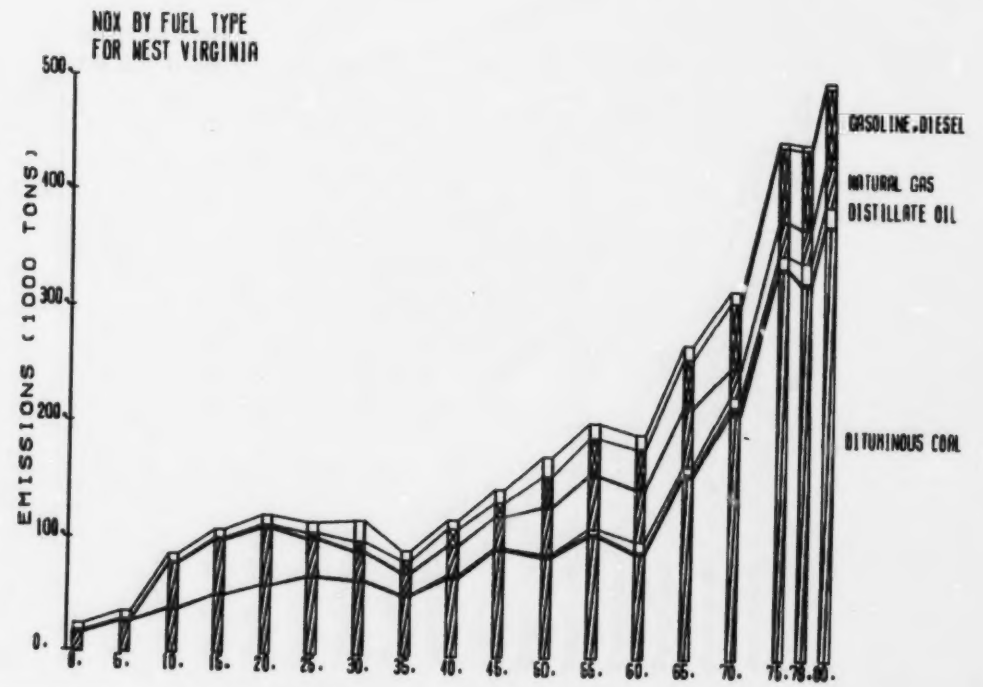


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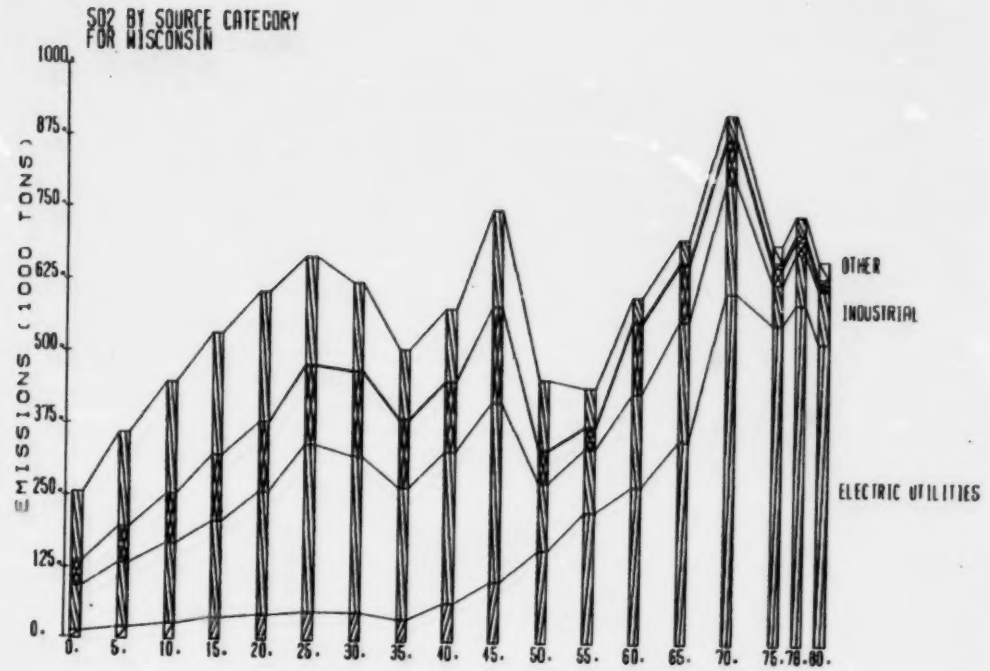


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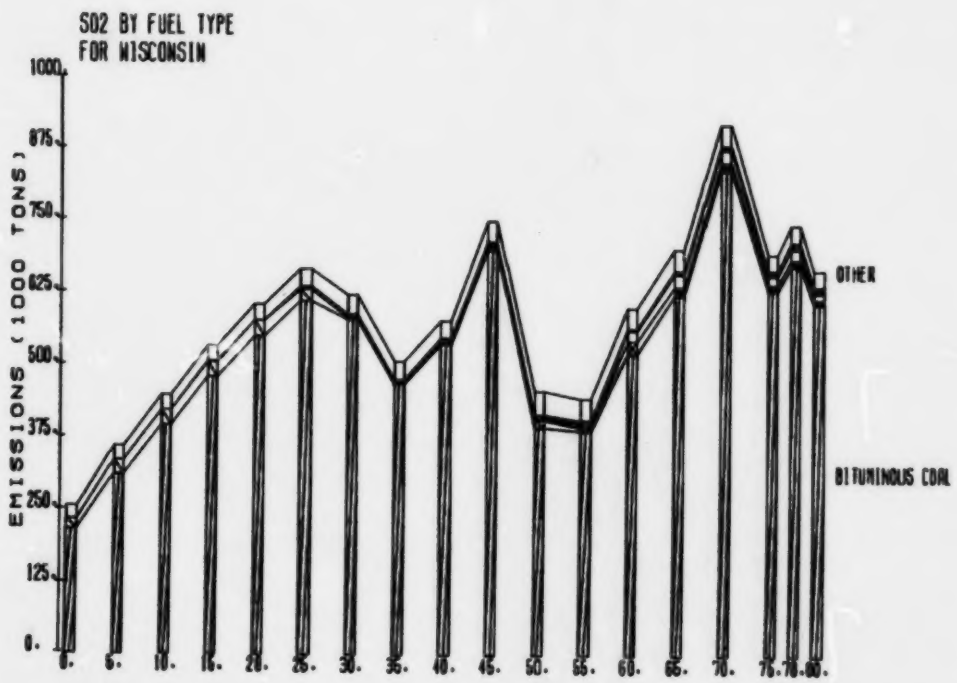


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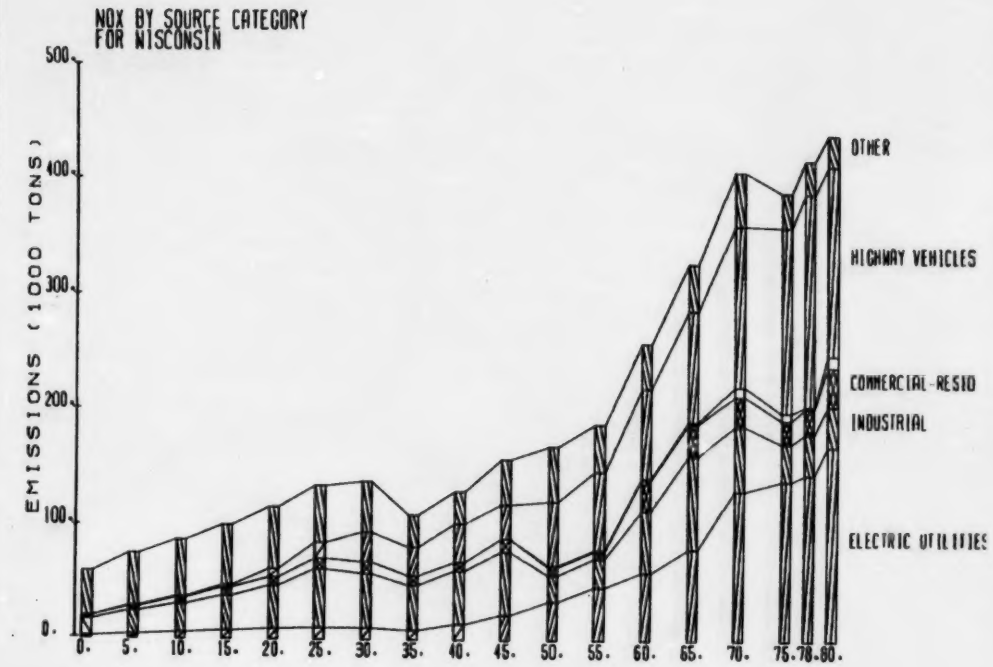


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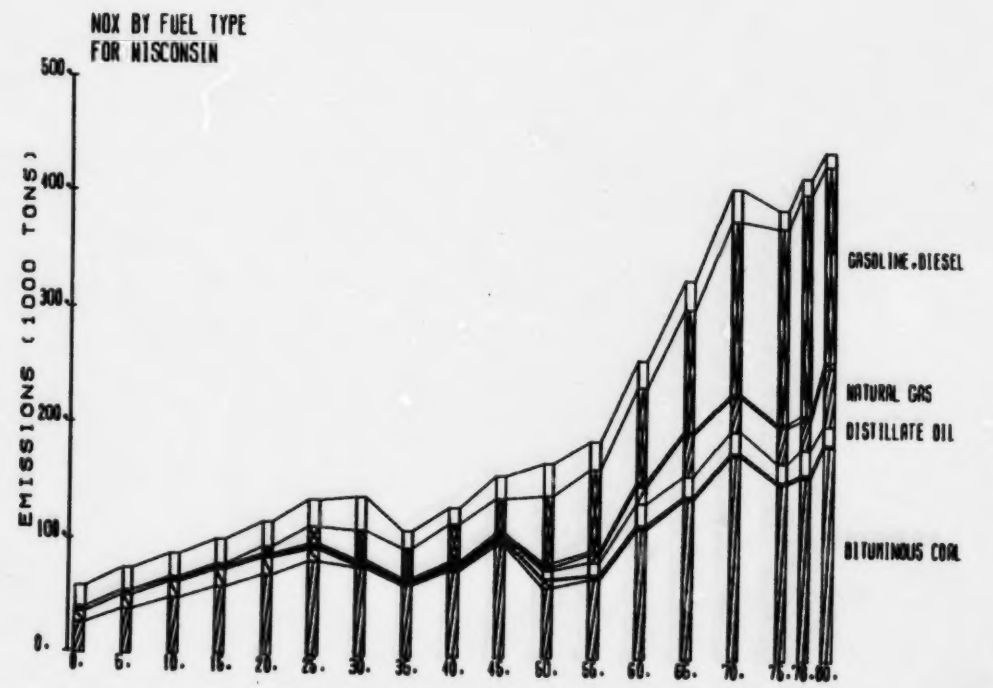


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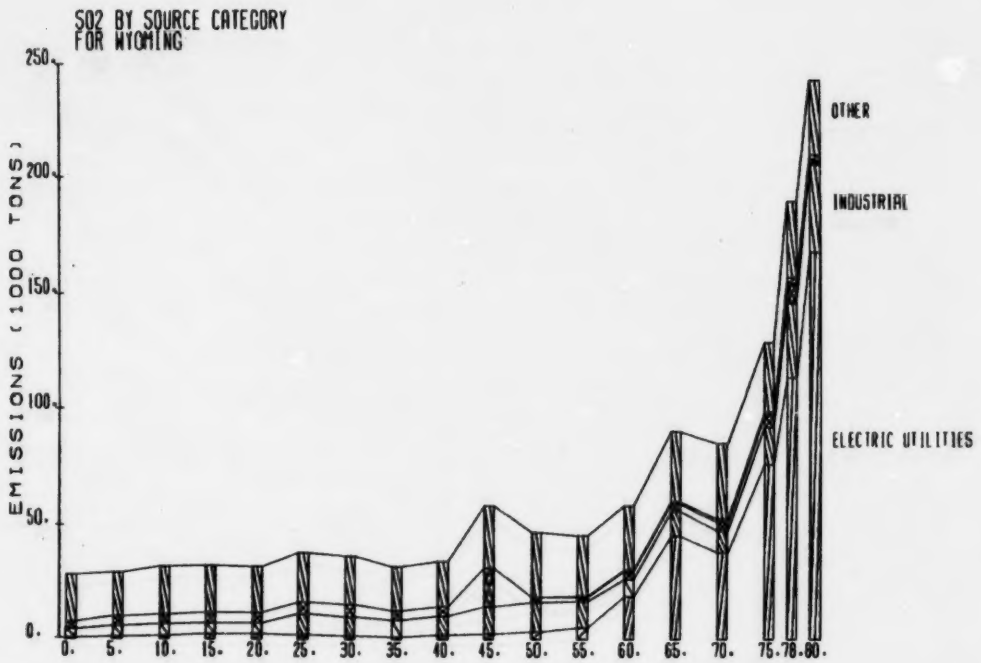


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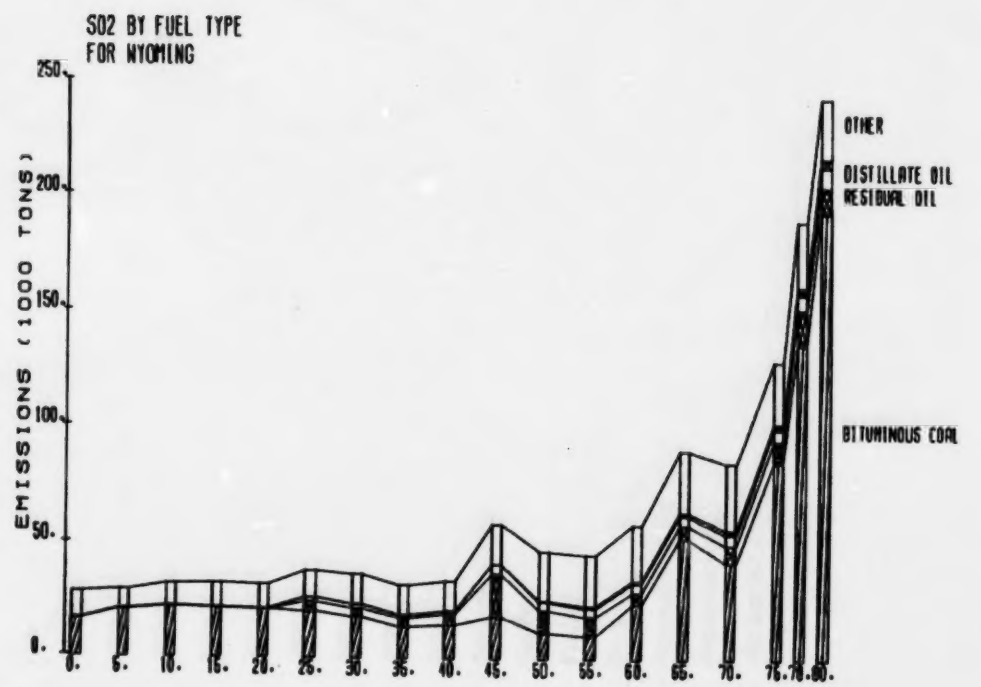


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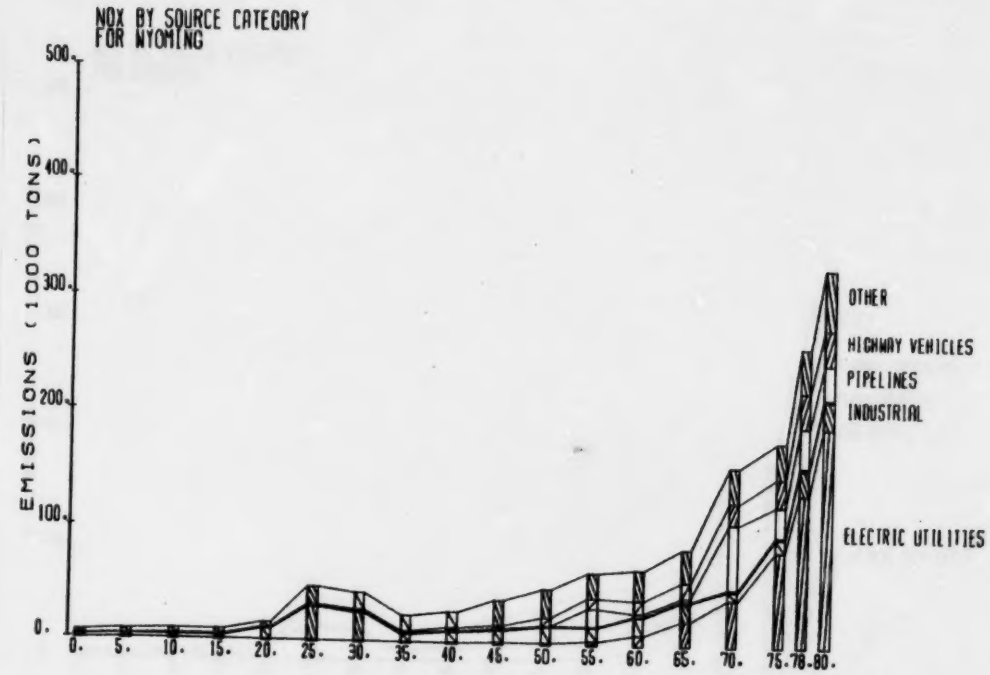


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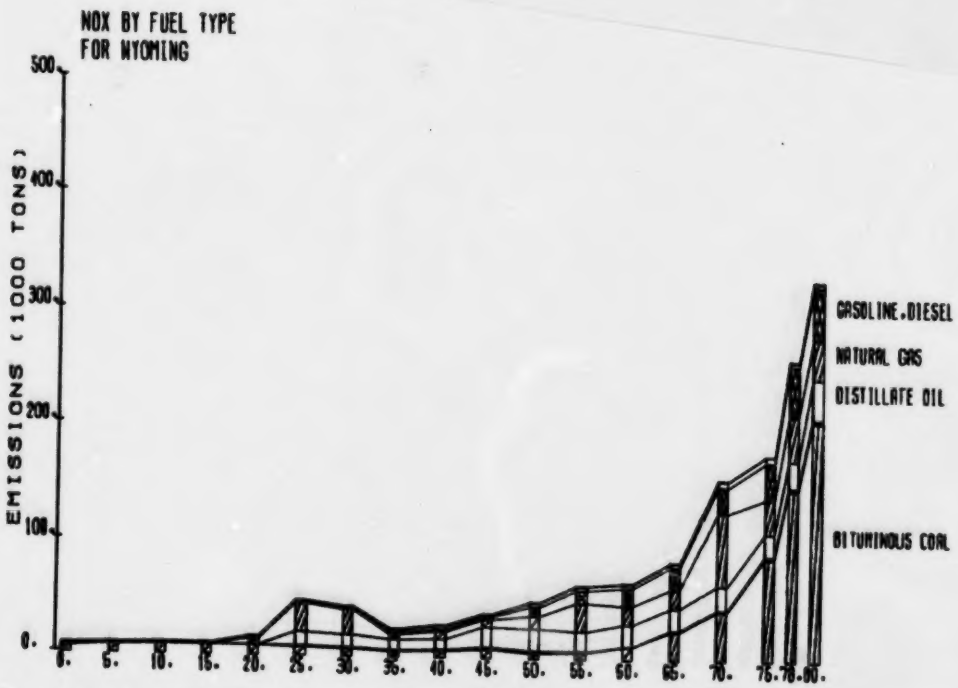


Figure 4.

# APPENDIX A

## FUEL SULFUR CONTENT DATA

Note: 1. All Sulfur content data are expressed as percentage by weight.

2. Values shown are for sulfur content as consumed.

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TABLE A-1. PERCENT SULFUR CONTENT OF BITUMINOUS COAL ELECTRICAL UTILITIES

| STATES | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| ALABAMA | 2.130 | 2.130 | 2.200 | 2.200 | 2.467 | 2.357 | 1.836 | 1.590 |
| ARIZONA | .850 | .850 | 1.300 | 1.300 | .420 | .450 | .406 | .470 |
| ARKANSAS | 3.900 | 3.900 | .000 | .000 | .000 | .000 | .380 a | .380 |
| CALIFORNIA | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 |
| COLORADO | .570 | .570 | .900 | .900 | .564 | .413 | .446 | .440 |
| CONNECTICUT | 1.630 | 1.630 | 2.300 | 2.300 | 2.270 | .000 | .500 b | .000 |
| DELAWARE | 1.660 | 1.660 | 2.100 | 2.100 | 1.249 | .700 | 1.000 a | 1.540 |
| DISTRICT OF COLUMBIA | 1.870 | 1.870 | 1.800 | 1.800 | 3.429 | 1.500 b | 1.000 b | .000 |
| FLORIDA | 2.820 | 2.820 | 2.200 | 2.200 | 1.445 | 1.876 | 1.978 | 2.180 |
| GEORGIA | 2.820 | 2.820 | 2.200 | 2.200 | 1.922 | 1.886 | 1.724 | 1.850 |
| IDAHO | .820 | .820 | .900 | .900 | .000 | .000 | .000 | .000 |
| ILLINOIS | 3.250 | 3.250 | 3.100 | 3.100 | 3.219 | 2.579 | 1.990 | 1.840 |
| INDIANA | 3.040 | 3.040 | 3.400 | 3.400 | 3.452 | 2.854 | 2.540 | 2.620 |
| IOWA | 3.780 | 3.780 | 4.000 | 4.000 | 2.789 | 1.963 | 1.594 | 1.080 |
| KANSAS | 3.930 | 3.930 | 4.000 | 4.000 | 3.579 | 3.598 | 1.553 | 1.230 |
| KENTUCKY | 2.930 | 2.930 | 2.900 | 2.900 | 3.055 | 2.548 | 2.727 | 2.510 |
| LOUISIANA | 3.900 | 3.900 | .000 | .000 | .000 | .000 | .440 a | .440 |
| MAINE | 1.190 | 1.190 | 2.100 | 2.100 | .000 | .000 | .000 | .000 |
| MARYLAND | 1.660 | 1.660 | 2.100 | 2.100 | 2.214 | 1.676 | 1.488 | 1.640 |
| MASSACHUSETTS | 1.460 | 1.460 | 1.500 | 1.500 | 2.646 | .851 | .000 | 1.160 |
| MICHIGAN | 2.500 | 2.500 | 2.400 | 2.400 | 2.578 | 2.424 | 1.844 | 1.300 |
| MINNESOTA | 2.370 | 2.370 | 2.800 | 2.800 | 2.836 | 1.459 | .999 | .940 |
| MISSISSIPPI | 2.130 | 2.130 | 2.200 | 2.200 | 3.796 | 1.656 | 2.231 | 1.640 |
| MISSOURI | 3.890 | 3.890 | 3.800 | 3.800 | 2.810 | 3.086 | 2.662 | 2.620 |
| MONTANA | .820 | .820 | .900 | .900 | .703 | .696 | .610 | .760 |
| NEBRASKA | 3.930 | 3.930 | 4.000 | 4.000 | 3.194 | .896 | .782 | .540 |
| NEVADA | .850 | .850 | 1.300 | 1.300 | .658 | .410 | .552 | .540 |
| NEW HAMPSHIRE | 1.190 | 1.190 | 2.100 | 2.100 | 2.420 | 2.340 | 2.160 | 2.100 b |
| NEW JERSEY | 2.000 | 2.000 | 2.400 | 2.400 | 1.971 | 1.893 | 1.668 | 1.660 |
| NEW MEXICO | .850 | .850 | 1.300 | 1.300 | .780 | .572 | .668 | .720 |
| NEW YORK | 1.470 | 1.470 | 2.200 | 2.200 | 1.865 | 2.081 | 1.713 | 1.840 |
| NORTH CAROLINA | 1.450 | 1.450 | 1.200 | 1.200 | 1.124 | 1.131 | 1.075 | .960 |
| NORTH DAKOTA | 2.380 | 2.380 | 1.100 | 1.100 | .758 | .617 | .612 | .650 |
| OHIO | 2.740 | 2.740 | 3.500 | 3.500 | 3.094 | 2.928 | 2.461 | 2.490 |
| OKLAHOMA | 3.900 | 3.900 | .000 | 1.500 a | 1.514 | .000 | .350 | .380 |
| OREGON | .820 | .820 | .000 | .000 | .000 | .000 | .560 a | .560 |
| PENNSYLVANIA | 1.750 | 1.750 | 2.200 | 2.200 | 2.579 | 2.092 | 2.112 | 2.110 |
| RHODE ISLAND | 1.190 | 1.190 | 2.100 | 2.100 | .000 | .000 | 2.000 a | .000 |
| SOUTH CAROLINA | 1.470 | 1.470 | 1.300 | 1.300 | 1.216 | 1.307 | 1.336 | 1.410 |
| SOUTH DAKOTA | 2.380 | 2.380 | 1.100 | 1.100 | 2.230 | .770 | .760 | .700 |
| TENNESSEE | 2.000 | 2.000 | 2.700 | 2.700 | 2.862 | 2.806 | 2.482 | 2.260 |
| TEXAS | 3.900 | 3.900 | .000 | .000 | .000 | .553 | .597 | .600 |
| UTAH | .880 | .880 | 1.000 | 1.000 | .550 | .500 | .530 | .500 |
| VERMONT | 1.190 | 1.190 | 2.100 | 2.100 | 3.170 | 2.000 | .000 | .000 |
| VIRGINIA | 1.380 | 1.380 | 1.300 | 1.300 | 1.102 | .833 | .965 | .880 |
| WASHINGTON | .820 | .820 | .000 | .000 | .000 | .510 | .970 | .810 |
| WEST VIRGINIA | 1.700 | 1.700 | 2.800 | 2.800 | 2.671 | 2.531 | 2.168 | 1.790 |
| WISCONSIN | 2.860 | 2.860 | 2.700 | 2.700 | 2.816 | 2.443 | 2.500 | 1.870 |
| WYOMING | .810 | .810 | 1.200 | 1.200 | .550 | .537 | .504 | .560 |

a Default value.

b Adjusted number to reflect state regulation limiting % sulfur content.

TABLE A-2. PERCENT SULFUR CONTENT OF BITUMINOUS COAL INDUSTRIAL BOILERS

| STATES | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| ALABAMA | 1.610 | 1.610 | 1.650 | 1.650 | 1.200 | 1.859 | 1.849 | 1.849 |
| ARIZONA | .880 | .880 | 1.200 | 1.200 | .500 | .500 | .512 | .512 |
| ARKANSAS | 3.250 | 3.250 | 2.700 | 2.700 | 3.500 | 1.773 | 2.112 | 2.112 |
| CALIFORNIA | .980 | .980 | .980 a | .980 a | .606 a | .606 | .576 | .576 |
| COLORADO | .500 | .500 | 1.000 | 1.000 | .606 | .742 | .809 | .809 |
| CONNECTICUT | 1.810 | 1.810 | 1.700 | 1.700 | .548 | 2.000 | .000 | .000 |
| DELAWARE | 1.630 | 1.630 | 1.600 | 1.600 | 1.930 | .900 | 2.116 | 2.116 |
| DISTRICT OF COLUMBIA | 1.330 | 1.330 | 1.450 | 1.450 | 1.207 | 1.000 b | .900 b | .850 b |
| FLORIDA | 1.520 | 1.520 | 1.650 | 1.650 | 1.200 | 1.200 a | 1.138 | 1.138 |
| GEORGIA | 1.520 | 1.520 | 1.650 | 1.650 | 1.200 | 1.208 | 1.177 | 1.177 |
| IDAHO | .870 | .870 | 1.000 | 1.000 | .661 | .668 | .693 | .693 |
| ILLINOIS | 3.240 | 3.240 | 2.100 | 2.100 | 2.690 | 2.445 | 2.207 | 2.207 |
| INDIANA | 3.000 | 3.000 | 2.250 | 2.250 | 2.393 | 3.247 | 2.560 | 2.560 |
| IOWA | 3.500 | 3.500 | 2.550 | 2.550 | 2.713 | 2.553 | 1.934 | 1.934 |
| KANSAS | 2.920 | 2.920 | 2.550 | 2.550 | 3.500 | 1.700 | 2.101 | 2.101 |
| KENTUCKY | 2.670 | 2.670 | 2.000 | 2.000 | 3.171 | 1.742 | 1.644 | 1.644 |
| LOUISIANA | 3.250 | 3.250 | 2.700 | 2.700 | 3.500 | .000 | 2.331 | 2.331 |
| MAINE | 1.350 | 1.350 | 1.600 | 1.600 | 1.670 | 2.000 b | 1.100 | 1.100 |
| MARYLAND | 1.630 | 1.630 | 1.600 | 1.600 | 1.930 | 1.981 | 2.000 b | 2.000 b |
| MASSACHUSETTS | 1.550 | 1.550 | 1.300 | 1.300 | 1.503 | 2.045 | 1.793 | 1.793 |
| MICHIGAN | 2.190 | 2.190 | 1.750 | 1.750 | 1.701 | 1.557 | 1.827 | 1.300 b |
| MINNESOTA | 2.210 | 2.210 | 1.950 | 1.950 | 1.942 | 2.121 | 1.069 | 1.069 |
| MISSISSIPPI | 1.610 | 1.610 | 1.650 | 1.650 | 1.200 | 1.055 | 2.507 | 2.507 |
| MISSOURI | 3.390 | 3.390 | 2.450 | 2.450 | 2.795 | 2.685 | 2.467 | 2.467 |
| MONTANA | .870 | .870 | 1.000 | 1.000 | .661 | .685 | .698 | .698 |
| NEBRASKA | 2.920 | 2.920 | 2.550 | 2.550 | 3.500 | .808 | .700 | .700 |
| NEVADA | .880 | .880 | 1.200 | 1.200 | .500 | .590 | .600 | .600 |
| NEW HAMPSHIRE | 1.350 | 1.350 | 1.600 | 1.600 | 1.670 | 2.000 | 2.100 | 2.100 |
| NEW JERSEY | 1.580 | 1.580 | 1.750 | 1.750 | 1.607 | 2.642 | 1.505 | 1.505 |
| NEW MEXICO | .850 | .850 | 1.200 | 1.200 | .500 | .000 | .575 | .575 |
| NEW YORK | 1.620 | 1.620 | 1.650 | 1.650 | 1.881 | 2.059 | 2.103 | 2.103 |
| NORTH CAROLINA | 1.420 | 1.420 | 1.150 | 1.150 | 1.200 | .901 | 1.103 | 1.103 |
| NORTH DAKOTA | .400 | .400 | 1.100 | 1.100 | .611 | .600 | .700 | .700 |
| OHIO | 2.520 | 2.520 | 2.300 | 2.300 | 2.453 | 2.109 | 2.511 | 2.511 |
| OKLAHOMA | 3.250 | 3.250 | 2.700 | 2.700 | 3.500 | 1.411 | 2.107 | 2.107 |
| OREGON | .810 | .810 | .000 | .000 | .558 | .685 | .773 | .773 |
| PENNSYLVANIA | 1.760 | 1.760 | 1.650 | 1.650 | 2.060 | 1.808 | 2.112 | 2.112 |
| RHODE ISLAND | 1.350 | 1.350 | 1.600 | 1.600 | 1.670 | 2.000 | 1.800 | 1.800 |
| SOUTH CAROLINA | 1.450 | 1.450 | 1.200 | 1.200 | 1.200 | .900 | 1.099 | 1.099 |
| SOUTH DAKOTA | .400 | .400 | 1.100 | 1.100 | .611 | .676 | .702 | .702 |
| TENNESSEE | 1.810 | 1.810 | 1.900 | 1.900 | 1.860 | 1.408 | 1.951 | 1.951 |
| TEXAS | 3.250 | 3.250 | 2.700 | 2.700 | 3.500 | 1.633 | 1.792 | 1.792 |
| UTAH | .880 | .880 | 1.050 | 1.050 | .537 | .602 | .608 | .608 |
| VERMONT | 1.350 | 1.350 | 1.600 | 1.600 | 1.670 | 1.670 b | 1.670 b | 1.670 b |
| VIRGINIA | 1.330 | 1.330 | 1.200 | 1.200 | 1.200 | .881 | 1.140 | 1.140 |
| WASHINGTON | .810 | .810 | .000 | .000 | .558 | .611 | .678 | .678 |
| WEST VIRGINIA | 1.550 | 1.550 | 1.950 | 1.950 | 1.483 | 1.620 | 1.737 | 1.737 |
| WISCONSIN | 2.810 | 2.810 | 1.900 | 1.900 | 2.131 | 1.851 | 2.065 | 2.065 |
| WYOMING | .820 | .820 | 1.150 | 1.150 | .700 | .700 | .697 | .697 |

a Default value.

b Adjusted number to reflect state regulation limiting % sulfur content.

## TABLE A-3. PERCENT OF BITUMINOUS COAL COMMERCIAL-RESIDENTIAL

| STATES | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| ALABAMA | 1.640 | 1.640 | 1.650 | 1.650 | 1.200 | 1.900 | 1.300 | 1.300 |
| ARIZONA | .880 | .880 | 1.200 | 1.200 | .500 | .000 | .000 | .000 |
| ARKANSAS | 2.710 | 2.710 | 2.700 | 2.700 | .000 | .000 | 2.400 | 2.400 |
| CALIFORNIA | .600 a | .600 a | .600 a | .600 a | .600 | .600 | .600 | .600 |
| COLORADO | .600 | .600 | 1.000 | 1.000 | .600 | .700 | .700 | .700 |
| CONNECTICUT | 1.630 | 1.630 | 1.700 | 1.700 | .000 | .000 | .000 | .500 |
| DELAWARE | 1.420 | 1.420 | 1.600 | 1.600 | 1.649 | .000 | .000 | 1.649 a |
| DISTRICT OF COLUMBIA | 1.050 | 1.050 | 1.450 | 1.450 | 1.200 | .600 | .000 | .600 a |
| FLORIDA | 1.470 | 1.470 | 1.650 | 1.650 | 1.200 | .000 | .000 | 1.200 a |
| GEORGIA | 1.470 | 1.470 | 1.650 | 1.650 | 1.200 | .900 | 1.100 | 1.100 |
| IDAHO | .860 | .860 | 1.000 | 1.000 | .534 | .534 a | .656 | .656 |
| ILLINOIS | 2.730 | 2.730 | 2.100 | 2.100 | 2.061 | 1.680 | 1.777 | 1.777 |
| INDIANA | 2.010 | 2.010 | 2.250 | 2.250 | 1.761 | 2.844 | 2.008 | 2.008 |
| IOWA | 2.830 | 2.830 | 2.550 | 2.550 | 1.395 | .936 | 1.747 | 1.747 |
| KANSAS | 1.710 | 1.710 | 2.550 | 2.550 | 3.500 | .000 | 2.100 | 2.100 |
| KENTUCKY | 2.140 | 2.140 | 2.000 | 2.000 | 1.976 | 1.241 | 1.381 | 1.381 |
| LOUISIANA | 2.710 | 2.710 | 2.700 | 2.700 | 2.700 a | .000 | .000 | 2.700 a |
| MAINE | 1.260 | 1.260 | 1.600 | 1.600 | 1.300 | .600 | .000 | .600 a |
| MARYLAND | 1.420 | 1.420 | 1.600 | 1.600 | 1.649 | .642 | 1.000 b | 1.000 b |
| MASSACHUSETTS | 1.290 | 1.290 | 1.300 | 1.300 | 1.510 | .600 | .000 | .600 a |
| MICHIGAN | 1.390 | 1.390 | 1.750 | 1.750 | 1.363 | .886 | 1.300 b | 1.300 b |
| MINNESOTA | 2.100 | 2.100 | 1.950 | 1.950 | 2.224 | 1.591 | 1.070 | 1.070 |
| MISSISSIPPI | 1.640 | 1.640 | 1.650 | 1.650 | 1.200 | .000 | .900 | .900 |
| MISSOURI | 3.320 | 3.320 | 2.450 | 2.450 | 2.998 | 2.670 | 2.290 | 2.290 |
| MONTANA | .860 | .860 | 1.000 | 1.000 | .534 | .657 | .700 | .700 |
| NEBRASKA | 1.710 | 1.710 | 2.550 | 2.550 | 3.500 | .700 | .700 | .700 |
| NEVADA | .880 | .880 | 1.200 | 1.200 | .500 | .600 | .700 | .700 |
| NEW HAMPSHIRE | 1.260 | 1.260 | 1.600 | 1.600 | 1.300 | .000 | .000 | 1.300 a |
| NEW JERSEY | 1.460 | 1.460 | 1.750 | 1.750 | 2.566 | 1.500 b | .000 | 1.500 b |
| NEW MEXICO | .770 | .770 | 1.200 | 1.200 | .500 | .000 | .000 | .500 a |
| NEW YORK | 1.600 | 1.600 | 1.650 | 1.650 | 2.325 | 2.000 | 1.966 | 1.966 |
| NORTH CAROLINA | 1.420 | 1.420 | 1.150 | 1.150 | 1.200 | .900 | 1.003 | 1.003 |
| NORTH DAKOTA | .480 | .480 | 1.100 | 1.100 | .745 | .620 | .705 | .705 |
| OHIO | 2.050 | 2.050 | 2.300 | 2.300 | 2.279 | 2.483 | 2.605 | 2.605 |
| OKLAHOMA | 2.710 | 2.710 | 2.700 | 2.700 | .000 | 2.100 a | 2.100 | 2.100 |
| OREGON | .860 | .860 | .860 a | .860 a | .543 | .622 | .650 | .650 |
| PENNSYLVANIA | 1.930 | 1.930 | 1.650 | 1.650 | 2.174 | 1.296 | 2.094 | 2.094 |
| RHODE ISLAND | 1.260 | 1.260 | 1.600 | 1.600 | 1.300 | .000 | .000 | 1.300 a |
| SOUTH CAROLINA | 1.460 | 1.460 | 1.200 | 1.200 | 1.200 | .900 | 1.100 | 1.100 |
| SOUTH DAKOTA | .480 | .480 | 1.100 | 1.100 | .745 | .887 | 1.100 | 1.100 |
| TENNESSEE | 3.010 | 3.010 | 1.900 | 1.900 | 1.356 | .928 | 1.540 | 1.540 |
| TEXAS | 2.710 | 2.710 | 2.700 | 2.700 | 2.000 a | .000 | .000 | 2.000 a |
| UTAH | 1.000 a | 1.000 a | 1.050 | 1.050 | .500 | .602 | .601 | .601 |
| VERMONT | 1.260 | 1.260 | 1.600 | 1.600 | 1.300 | 1.300 a | .000 | 1.300 a |
| VIRGINIA | 1.240 | 1.240 | 1.200 | 1.200 | 1.207 | .877 | 1.059 | 1.059 |
| WASHINGTON | .860 | .860 | .860 a | .860 a | .543 | .676 | .597 | .597 |
| WEST VIRGINIA | 1.350 | 1.350 | 1.950 | 1.950 | 1.249 | 1.527 | 2.260 | 2.260 |
| WISCONSIN | 1.670 | 1.670 | 1.900 | 1.900 | 1.721 | 1.560 | 1.489 | 1.489 |
| WYOMING | .730 | .730 | 1.150 | 1.150 | .700 | .700 | .696 | .696 |

a Default value.

b Adjusted number to reflect state regulation limiting % sulfur content.

# TABLE A-4. PERCENT SULFUR CONTENT OF ANTHRACITE COAL ALL USES

| STATES | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| ALABAMA | .800 | .800 | .800 | .800 | .800 | .800 | .800 | .800 |
| ARIZONA | .800 | .800 | .800 | .800 | .800 | .800 | .800 | .800 |
| ARKANSAS | .800 | .800 | .800 | .800 | .800 | .800 | .800 | .800 |
| CALIFORNIA | .800 | .800 | .800 | .800 | .800 | .800 | .800 | .800 |
| COLORADO | .800 | .800 | .800 | .800 | .800 | .800 | .800 | .800 |
| CONNECTICUT | .800 | .800 | .800 | .800 | .800 | .800 | .800 | .800 |
| DELAWARE | .800 | .800 | .800 | .800 | .800 | .800 | .800 | .800 |
| DISTRICT OF COLUMBIA | .800 | .800 | .800 | .800 | .800 | .800 | .800 | .800 |
| FLORIDA | .800 | .800 | .800 | .800 | .800 | .800 | .800 | .800 |
| GEORGIA | .800 | .800 | .800 | .800 | .800 | .800 | .800 | .800 |
| IDAHO | .800 | .800 | .800 | .800 | .800 | .800 | .800 | .800 |
| ILLINOIS | .800 | .800 | .800 | .800 | .800 | .800 | .800 | .800 |
| INDIANA | .800 | .800 | .800 | .800 | .800 | .800 | .800 | .800 |
| IOWA | .800 | .800 | .800 | .800 | .800 | .800 | .800 | .800 |
| KANSAS | .800 | .800 | .800 | .800 | .800 | .800 | .800 | .800 |
| KENTUCKY | .800 | .800 | .800 | .800 | .800 | .800 | .800 | .800 |
| LOUISIANA | .800 | .800 | .800 | .800 | .800 | .800 | .800 | .800 |
| MAINE | .800 | .800 | .800 | .800 | .800 | .800 | .800 | .800 |
| MARYLAND | .800 | .800 | .800 | .800 | .800 | .800 | .800 | .800 |
| MASSACHUSETTS | .800 | .800 | .800 | .800 | .800 | .800 | .800 | .800 |
| MICHIGAN | .800 | .800 | .800 | .800 | .800 | .800 | .800 | .800 |
| MINNESOTA | .800 | .800 | .800 | .800 | .800 | .800 | .800 | .800 |
| MISSISSIPPI | .800 | .800 | .800 | .800 | .800 | .800 | .800 | .800 |
| MISSOURI | .800 | .800 | .800 | .800 | .800 | .800 | .800 | .800 |
| MONTANA | .800 | .800 | .800 | .800 | .800 | .800 | .800 | .800 |
| NEBRASKA | .800 | .800 | .800 | .800 | .800 | .800 | .800 | .800 |
| NEVADA | .800 | .800 | .800 | .800 | .800 | .800 | .800 | .800 |
| NEW HAMPSHIRE | .800 | .800 | .800 | .800 | .800 | .800 | .800 | .800 |
| NEW JERSEY | .800 | .800 | .800 | .800 | .800 | .800 | .800 | .800 |
| NEW MEXICO | .800 | .800 | .800 | .800 | .800 | .800 | .800 | .800 |
| NEW YORK | .800 | .800 | .800 | .800 | .800 | .800 | .800 | .800 |
| NORTH CAROLINA | .800 | .800 | .800 | .800 | .800 | .800 | .800 | .800 |
| NORTH DAKOTA | .800 | .800 | .800 | .800 | .800 | .800 | .800 | .800 |
| OHIO | .800 | .800 | .800 | .800 | .800 | .800 | .800 | .800 |
| OKLAHOMA | .800 | .800 | .800 | .800 | .800 | .800 | .800 | .800 |
| OREGON | .800 | .800 | .800 | .800 | .800 | .800 | .800 | .800 |
| PENNSYLVANIA | .800 | .800 | .800 | .800 | .800 | .800 | .800 | .800 |
| RHODE ISLAND | .800 | .800 | .800 | .800 | .800 | .800 | .800 | .800 |
| SOUTH CAROLINA | .800 | .800 | .800 | .800 | .800 | .800 | .800 | .800 |
| SOUTH DAKOTA | .800 | .800 | .800 | .800 | .800 | .800 | .800 | .800 |
| TENNESSEE | .800 | .800 | .800 | .800 | .800 | .800 | .800 | .800 |
| TEXAS | .800 | .800 | .800 | .800 | .800 | .800 | .800 | .800 |
| UTAH | .800 | .800 | .800 | .800 | .800 | .800 | .800 | .800 |
| VERMONT | .800 | .800 | .800 | .800 | .800 | .800 | .800 | .800 |
| VIRGINIA | .800 | .800 | .800 | .800 | .800 | .800 | .800 | .800 |
| WASHINGTON | .800 | .800 | .800 | .800 | .800 | .800 | .800 | .800 |
| WEST VIRGINIA | .800 | .800 | .800 | .800 | .800 | .800 | .800 | .800 |
| WISCONSIN | .800 | .800 | .800 | .800 | .800 | .800 | .800 | .800 |
| WYOMING | .800 | .800 | .800 | .800 | .800 | .800 | .800 | .800 |

TABLE A-5. PERCENT SULFUR CONTENT OF RESIDUAL OIL ELECTRIC UTILITIES

| STATES | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| ALABAMA | .000 | .000 | .000 | .000 | .000 | .000 | NA | .362 |
| ARIZONA | 1.269 | 1.269 | 1.269 | 1.269 | 1.269 | .724 | .769 | .776 |
| ARKANSAS | 2.028 | 2.028 | 2.028 | 2.028 | 2.028 | 1.140 | 1.170 | 1.369 |
| CALIFORNIA | .712 | .712 | .712 | .712 | .712 | .418 | .300 | .330 |
| COLORADO | 1.282 | 1.282 | 1.282 | 1.282 | 1.282 | 1.173 | .798 | .534 |
| CONNECTICUT | 1.654 | 1.654 | 1.654 | 1.654 | 1.654 | .422 | .379 | .430 |
| DELAWARE | 1.150 | 1.150 | 1.150 | 1.150 | 1.150 | 1.003 | .796 | 1.006 |
| DISTRICT OF COLUMBIA | 2.994 | 2.994 | 2.994 | 2.994 | 2.994 | .912 | .927 | .860 |
| FLORIDA | 1.889 | 1.889 | 1.889 | 1.889 | 1.889 | 1.635 | 1.298 | 1.492 |
| GEORGIA | 2.599 | 2.599 | 2.599 | 2.599 | 2.599 | 3.296 | 2.226 | 1.736 |
| IDAHO | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 |
| ILLINOIS | 1.560 | 1.560 | 1.560 | 1.560 | 1.560 | 1.283 | .676 | .664 |
| INDIANA | .217 | .217 | .217 | .217 | .217 | .000 | .000 | .299 |
| IOWA | 2.292 | 2.292 | 2.292 | 2.292 | 2.292 | .000 | .223 | .226 |
| KANSAS | 2.017 | 2.017 | 2.017 | 2.017 | 2.017 | 1.116 | 1.105 | .493 |
| KENTUCKY | .196 | .196 | .196 | .196 | .196 | .000 | .289 | .362 |
| LOUISIANA | NA | NA | NA | NA | NA | .711 | .785 | .843 |
| MAINE | 2.032 | 2.032 | 2.032 | 2.032 | 2.032 | 2.204 | 1.471 | 1.220 |
| MARYLAND | 1.645 | 1.645 | 1.645 | 1.645 | 1.645 | 1.358 | 1.261 | 1.260 |
| MASSACHUSETTS | 2.076 | 2.076 | 2.076 | 2.076 | 2.076 | .731 | 1.577 | 1.750 |
| MICHIGAN | 1.826 | 1.826 | 1.826 | 1.826 | 1.826 | .745 | .703 | .663 |
| MINNESOTA | 2.818 | 2.818 | 2.818 | 2.818 | 2.818 | 3.468 | 1.540 | 1.008 |
| MISSISSIPPI | 2.524 | 2.524 | 2.524 | 2.524 | 2.524 | 2.687 | 2.283 | 2.606 |
| MISSOURI | 1.686 | 1.686 | 1.686 | 1.686 | 1.686 | 1.791 | 1.263 | .994 |
| MONTANA | 4.200 | 4.200 | 4.200 | 4.200 | 4.200 | .000 | .000 | .277 |
| NEBRASKA | 7.155 | 7.155 | 7.155 | 7.155 | 7.155 | 1.135 | 1.203 | .820 |
| NEVADA | 1.173 | 1.173 | 1.173 | 1.173 | 1.173 | .732 | .678 | .720 |
| NEW HAMPSHIRE | 2.295 | 2.295 | 2.295 | 2.295 | 2.295 | 1.842 | 1.701 | 1.930 |
| NEW JERSEY | 1.021 | 1.021 | 1.021 | 1.021 | 1.021 | .403 | .438 | .450 |
| NEW MEXICO | .857 | .857 | .857 | .857 | .857 | 2.590 | .520 | 1.000 |
| NEW YORK | 1.216 | 1.216 | 1.216 | 1.216 | 1.216 | 1.152 | 1.009 | 1.240 |
| NORTH CAROLINA | NA | NA | NA | NA | NA | 1.742 | 1.710 | .232 |
| NORTH DAKOTA | .036 | .036 | .036 | .036 | .036 | .000 | .200 | .226 |
| OHIO | .565 | .565 | .565 | .565 | .565 | 4.469 | 1.199 | .530 |
| OKLAHOMA | 6.473 | 6.473 | 6.473 | 6.473 | 6.473 | 5.086 | .000 | .180 |
| OREGON | 1.700 | 1.700 | 1.700 | 1.700 | 1.700 | 6.688 | .000 | .270 |
| PENNSYLVANIA | 1.329 | 1.329 | 1.329 | 1.329 | 1.329 | .496 | .612 | .650 |
| RHODE ISLAND | 2.306 | 2.306 | 2.306 | 2.306 | 2.306 | .932 | .875 | .940 |
| SOUTH CAROLINA | 3.156 | 3.156 | 3.156 | 3.156 | 3.156 | 1.999 | 1.956 | 1.836 |
| SOUTH DAKOTA | .888 | .888 | .888 | .888 | .888 | 1.586 | .890 | .348 |
| TENNESSEE | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .540 |
| TEXAS | 1.106 | 1.106 | 1.106 | 1.106 | 1.106 | .746 | .505 | .495 |
| UTAH | .871 | .871 | .871 | .871 | .871 | .331 | .294 | .294 a |
| VERMONT | .300 | .300 | .300 | .300 | .300 | .000 | .000 | .340 |
| VIRGINIA | 2.376 | 2.376 | 2.376 | 2.376 | 2.376 | 1.834 | 1.585 | 1.303 |
| WASHINGTON | .100 | .100 | .100 | .100 | .100 | .000 | .000 | 1.630 |
| WEST VIRGINIA | .250 | .250 | .250 | .250 | .250 | .000 | .280 | .292 |
| WISCONSIN | 1.419 | 1.419 | 1.419 | 1.419 | 1.419 | 3.299 | 1.630 | .418 |
| WYOMING | .109 | .109 | .109 | .109 | .109 | .000 | .300 | .301 |

a Default value.

## TABLE A-6. PERCENT SULFUR CONTENT OF RESIDUAL OIL INDUSTRIAL

| STATES | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| ALABAMA | 1.550 | 1.550 | 1.500 | 1.650 | 1.730 | 1.870 | 1.700 | 1.920 |
| ARIZONA | 2.010 | 2.010 | 1.930 | 1.620 | 1.850 | 1.530 | 1.480 | 1.510 |
| ARKANSAS | 1.420 | 1.420 | 1.530 | 1.590 | 1.760 | 1.590 | 1.510 | 1.670 |
| CALIFORNIA | 1.970 | 1.970 | 1.890 | 1.560 | 1.730 | 1.600 | 1.460 | 1.400 b |
| COLORADO | 2.140 | 2.140 | 2.040 | 1.810 | 2.210 | 1.330 | 1.570 | 1.570 |
| CONNECTICUT | 1.440 | 1.440 | 1.360 | 1.430 | 1.360 | .500 b | .500 b | .500 b |
| DELAWARE | 1.440 | 1.440 | 1.360 | 1.430 | 1.360 | 1.400 | 1.220 | 1.490 |
| DISTRICT OF COLUMBIA | 1.440 | 1.440 | 1.360 | 1.430 | 1.360 | 1.000 b | .900 b | .850 b |
| FLORIDA | 1.550 | 1.550 | 1.500 | 1.650 | 1.730 | 1.870 | 1.700 | 1.920 |
| GEORGIA | 1.550 | 1.550 | 1.500 | 1.650 | 1.730 | 1.870 | 1.700 | 1.920 |
| IDAHO | 2.050 | 2.050 | 1.970 | 1.680 | 1.970 | 1.460 | 1.510 | 1.530 |
| ILLINOIS | 1.380 | 1.380 | 1.540 | 1.580 | 1.770 | 1.500 | 1.450 | 1.590 |
| INDIANA | 1.380 | 1.380 | 1.540 | 1.580 | 1.770 | 1.500 | 1.450 | 1.590 |
| IOWA | 1.380 | 1.380 | 1.540 | 1.580 | 1.770 | 1.500 | 1.450 | 1.590 |
| KANSAS | 1.380 | 1.380 | 1.540 | 1.580 | 1.770 | 1.500 | 1.450 | 1.590 |
| KENTUCKY | 1.410 | 1.410 | 1.450 | 1.500 | 1.560 | 1.450 | 1.330 | 1.540 |
| LOUISIANA | 1.550 | 1.550 | 1.500 | 1.650 | 1.730 | 1.870 | 1.700 | 1.920 |
| MAINE | 1.440 | 1.440 | 1.360 | 1.430 | 1.360 | 1.400 | 1.220 | 1.490 |
| MARYLAND | 1.440 | 1.440 | 1.360 | 1.430 | 1.360 | 1.400 | 1.220 | 1.490 |
| MASSACHUSETTS | 1.440 | 1.440 | 1.360 | 1.430 | 1.360 | 1.400 | 1.220 | 1.490 |
| MICHIGAN | 1.380 | 1.380 | 1.450 | 1.500 | 1.560 | 1.450 | 1.330 | 1.300 b |
| MINNESOTA | 1.380 | 1.380 | 1.540 | 1.580 | 1.770 | 1.500 | 1.450 | 1.590 |
| MISSISSIPPI | 1.550 | 1.550 | 1.500 | 1.650 | 1.730 | 1.870 | 1.700 | 1.920 |
| MISSOURI | 1.380 | 1.380 | 1.540 | 1.580 | 1.770 | 1.500 | 1.450 | 1.590 |
| MONTANA | 2.140 | 2.140 | 2.040 | 1.810 | 2.210 | 1.330 | 1.570 | 1.570 |
| NEBRASKA | 1.760 | 1.760 | 1.790 | 1.690 | 1.990 | 1.410 | 1.510 | 1.580 |
| NEVADA | 1.970 | 1.970 | 1.890 | 1.560 | 1.730 | 1.600 | 1.460 | 1.500 |
| NEW HAMPSHIRE | 1.440 | 1.440 | 1.360 | 1.430 | 1.360 | 1.400 | 1.220 | 1.490 |
| NEW JERSEY | 1.440 | 1.440 | 1.360 | 1.430 | 1.360 | 1.400 | 1.000 b | 1.000 b |
| NEW MEXICO | 2.140 | 2.140 | 2.040 | 1.810 | 2.210 | 1.330 | 1.570 | 1.570 |
| NEW YORK | 1.440 | 1.440 | 1.360 | 1.430 | 1.360 | 1.400 | 1.220 | 1.490 |
| NORTH CAROLINA | 1.550 | 1.550 | 1.500 | 1.650 | 1.730 | 1.870 | 1.700 | 1.920 |
| NORTH DAKOTA | 1.380 | 1.380 | 1.540 | 1.580 | 1.770 | 1.500 | 1.450 | 1.590 |
| OHIO | 1.440 | 1.440 | 1.360 | 1.430 | 1.360 | 1.400 | 1.220 | 1.490 |
| OKLAHOMA | 1.240 | 1.240 | 1.640 | 1.620 | 1.860 | 1.470 | 1.470 | 1.590 |
| OREGON | 1.970 | 1.970 | 1.890 | 1.560 | 1.730 | 1.600 | 1.460 | 1.500 |
| PENNSYLVANIA | 1.440 | 1.440 | 1.360 | 1.430 | 1.360 | 1.400 | 1.220 | 1.490 |
| RHODE ISLAND | 1.440 | 1.440 | 1.360 | 1.430 | 1.360 | 1.400 | 1.220 | 1.490 |
| SOUTH CAROLINA | 1.550 | 1.550 | 1.500 | 1.650 | 1.730 | 1.870 | 1.700 | 1.920 |
| SOUTH DAKOTA | 1.380 | 1.380 | 1.540 | 1.580 | 1.770 | 1.500 | 1.450 | 1.590 |
| TENNESSEE | 1.550 | 1.550 | 1.500 | 1.650 | 1.730 | 1.870 | 1.700 | 1.920 |
| TEXAS | 1.655 | 1.655 | 1.650 | 1.670 | 1.860 | 1.640 | 1.600 | 1.750 |
| UTAH | 2.106 | 2.106 | 2.010 | 1.760 | 2.110 | 1.380 | 1.540 | 1.560 |
| VERMONT | 1.440 | 1.440 | 1.360 | 1.430 | 1.360 | 1.400 | 1.220 | 1.490 |
| VIRGINIA | 1.440 | 1.440 | 1.360 | 1.430 | 1.360 | 1.400 | 1.220 | 1.490 |
| WASHINGTON | 1.970 | 1.970 | 1.890 | 1.560 | 1.730 | 1.600 | 1.460 | 1.500 |
| WEST VIRGINIA | 1.440 | 1.440 | 1.360 | 1.430 | 1.360 | 1.400 | 1.220 | 1.490 |
| WISCONSIN | 1.380 | 1.380 | 1.540 | 1.580 | 1.770 | 1.500 | 1.450 | 1.450 b |
| WYOMING | 2.140 | 2.140 | 2.040 | 1.810 | 2.210 | 1.380 | 1.570 | 1.570 |

b Adjusted number to reflect state regulation limiting % sulfur content.

TABLE A-7. PERCENT SULFUR CONTENT OF RESIDUAL OIL COMMERCIAL

| STATES | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| ALABAMA | 1.550 | 1.550 | 1.500 | 1.650 | 1.730 | 1.870 | 1.700 | 1.920 |
| ARIZONA | 2.010 | 2.010 | 1.930 | 1.620 | 1.850 | 1.530 | 1.480 | 1.510 |
| ARKANSAS | 1.420 | 1.420 | 1.530 | 1.590 | 1.760 | 1.590 | 1.510 | 1.670 |
| CALIFORNIA | 1.970 | 1.970 | 1.890 | 1.560 | 1.730 | 1.600 | 1.460 | 1.400 b |
| COLORADO | 2.140 | 2.140 | 2.040 | 1.810 | 2.210 | 1.330 | 1.570 | 1.570 |
| CONNECTICUT | 1.440 | 1.440 | 1.360 | 1.430 | 1.360 | .500 b | .500 b | .500 b |
| DELAWARE | 1.440 | 1.440 | 1.360 | 1.430 | 1.360 | 1.400 | 1.220 | 1.490 |
| DISTRICT OF COLUMBIA | 1.440 | 1.440 | 1.360 | 1.430 | 1.360 | 1.000 b | .900 b | .850 b |
| FLORIDA | 1.550 | 1.550 | 1.500 | 1.650 | 1.730 | 1.870 | 1.700 | 1.920 |
| GEORGIA | 1.550 | 1.550 | 1.500 | 1.650 | 1.730 | 1.870 | 1.700 | 1.920 |
| IDAHO | 2.050 | 2.050 | 1.970 | 1.680 | 1.970 | 1.460 | 1.510 | 1.530 |
| ILLINOIS | 1.380 | 1.380 | 1.540 | 1.580 | 1.770 | 1.500 | 1.450 | 1.590 |
| INDIANA | 1.380 | 1.380 | 1.540 | 1.580 | 1.770 | 1.500 | 1.450 | 1.590 |
| IOWA | 1.380 | 1.380 | 1.540 | 1.580 | 1.770 | 1.500 | 1.450 | 1.590 |
| KANSAS | 1.380 | 1.380 | 1.540 | 1.580 | 1.770 | 1.500 | 1.450 | 1.590 |
| KENTUCKY | 1.410 | 1.410 | 1.450 | 1.500 | 1.560 | 1.450 | 1.330 | 1.540 |
| LOUISIANA | 1.550 | 1.550 | 1.500 | 1.650 | 1.730 | 1.870 | 1.700 | 1.920 |
| MAINE | 1.440 | 1.440 | 1.360 | 1.430 | 1.360 | 1.400 | 1.220 | 1.490 |
| MARYLAND | 1.440 | 1.440 | 1.360 | 1.430 | 1.360 | 1.400 | 1.220 | 1.490 |
| MASSACHUSETTS | 1.440 | 1.440 | 1.360 | 1.430 | 1.360 | 1.400 | 1.220 | 1.490 |
| MICHIGAN | 1.380 | 1.380 | 1.450 | 1.500 | 1.560 | 1.450 | 1.330 | 1.300 b |
| MINNESOTA | 1.380 | 1.380 | 1.540 | 1.580 | 1.770 | 1.500 | 1.450 | 1.590 |
| MISSISSIPPI | 1.550 | 1.550 | 1.500 | 1.650 | 1.730 | 1.870 | 1.700 | 1.920 |
| MISSOURI | 1.380 | 1.380 | 1.540 | 1.580 | 1.770 | 1.500 | 1.450 | 1.590 |
| MONTANA | 2.140 | 2.140 | 2.040 | 1.810 | 2.210 | 1.330 | 1.570 | 1.570 |
| NEBRASKA | 1.760 | 1.760 | 1.790 | 1.690 | 1.990 | 1.410 | 1.510 | 1.580 |
| NEVADA | 1.970 | 1.970 | 1.890 | 1.560 | 1.730 | 1.600 | 1.460 | 1.500 |
| NEW HAMPSHIRE | 1.440 | 1.440 | 1.360 | 1.430 | 1.360 | 1.400 | 1.220 | 1.490 |
| NEW JERSEY | 1.440 | 1.440 | 1.360 | 1.430 | 1.360 | 1.400 | 1.000 b | 1.000 b |
| NEW MEXICO | 2.140 | 2.140 | 2.040 | 1.810 | 2.210 | 1.330 | 1.570 | 1.570 |
| NEW YORK | 1.440 | 1.440 | 1.360 | 1.430 | 1.360 | 1.400 | 1.220 | 1.490 |
| NORTH CAROLINA | 1.550 | 1.550 | 1.500 | 1.650 | 1.730 | 1.870 | 1.700 | 1.920 |
| NORTH DAKOTA | 1.380 | 1.380 | 1.540 | 1.580 | 1.770 | 1.500 | 1.450 | 1.590 |
| OHIO | 1.440 | 1.440 | 1.360 | 1.430 | 1.360 | 1.400 | 1.220 | 1.490 |
| OKLAHOMA | 1.240 | 1.240 | 1.640 | 1.620 | 1.860 | 1.470 | 1.470 | 1.590 |
| OREGON | 1.970 | 1.970 | 1.890 | 1.560 | 1.730 | 1.600 | 1.460 | 1.500 |
| PENNSYLVANIA | 1.440 | 1.440 | 1.360 | 1.430 | 1.360 | 1.400 | 1.220 | 1.490 |
| RHODE ISLAND | 1.440 | 1.440 | 1.360 | 1.430 | 1.360 | 1.400 | 1.220 | 1.490 |
| SOUTH CAROLINA | 1.550 | 1.550 | 1.500 | 1.650 | 1.730 | 1.870 | 1.700 | 1.920 |
| SOUTH DAKOTA | 1.380 | 1.380 | 1.540 | 1.580 | 1.770 | 1.500 | 1.450 | 1.590 |
| TENNESSEE | 1.550 | 1.550 | 1.500 | 1.650 | 1.730 | 1.870 | 1.700 | 1.920 |
| TEXAS | 1.655 | 1.655 | 1.650 | 1.670 | 1.860 | 1.640 | 1.600 | 1.750 |
| UTAH | 2.106 | 2.106 | 2.010 | 1.760 | 2.110 | 1.380 | 1.540 | 1.560 |
| VERMONT | 1.440 | 1.440 | 1.360 | 1.430 | 1.360 | 1.400 | 1.220 | 1.490 |
| VIRGINIA | 1.440 | 1.440 | 1.360 | 1.430 | 1.360 | 1.400 | 1.220 | 1.490 |
| WASHINGTON | 1.970 | 1.970 | 1.890 | 1.560 | 1.730 | 1.600 | 1.460 | 1.500 |
| WEST VIRGINIA | 1.440 | 1.440 | 1.360 | 1.430 | 1.360 | 1.400 | 1.220 | 1.490 |
| WISCONSIN | 1.380 | 1.380 | 1.540 | 1.580 | 1.770 | 1.500 | 1.450 | 1.450 b |
| WYOMING | 2.140 | 2.140 | 2.040 | 1.810 | 2.210 | 1.380 | 1.570 | 1.570 |

b Adjusted number to reflect state regulation limiting % sulfur content.

TABLE A-8. PERCENT SULFUR CONTENT OF DISTILLATE OIL ELECTRIC UTILITIES

| STATES | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| ALABAMA | .300 | .300 | .300 | .300 | .300 | .160 | .160 | .160 |
| ARIZONA | .300 | .300 | .300 | .300 | .300 | .474 | .474 | .474 |
| a ARKANSAS | .300 | .300 | .300 | .300 | .300 | .300 | .300 | .300 |
| CALIFORNIA | .300 | .300 | .300 | .300 | .300 | .267 | .267 | .267 |
| COLORADO | .300 | .300 | .300 | .300 | .300 | .280 | .280 | .280 |
| a CONNECTICUT | .300 | .300 | .300 | .300 | .300 | .300 | .300 | .300 |
| a DELAWARE | .300 | .300 | .300 | .300 | .300 | .300 | .300 | .300 |
| DISTRICT OF COLUMBIA | .300 | .300 | .300 | .300 | .300 | .280 | .280 | .280 |
| a FLORIDA | .300 | .300 | .300 | .300 | .300 | .300 | .300 | .300 |
| GEORGIA | .300 | .300 | .300 | .300 | .300 | .228 | .228 | .228 |
| a IDAHO | .300 | .300 | .300 | .300 | .300 | .300 | .300 | .300 |
| ILLINOIS | .300 | .300 | .300 | .300 | .300 | .187 | .187 | .187 |
| INDIANA | .300 | .300 | .300 | .300 | .300 | .364 | .364 | .364 |
| IOWA | .300 | .300 | .300 | .300 | .300 | .384 | .384 | .384 |
| KANSAS | .300 | .300 | .300 | .300 | .300 | .298 | .298 | .298 |
| a KENTUCKY | .300 | .300 | .300 | .300 | .300 | .300 | .300 | .300 |
| LOUISIANA | .300 | .300 | .300 | .300 | .300 | .158 | .158 | .158 |
| a MAINE | .300 | .300 | .300 | .300 | .300 | .300 | .300 | .300 |
| MARYLAND | .300 | .300 | .300 | .300 | .300 | .202 | .202 | .202 |
| a MASSACHUSETTS | .300 | .300 | .300 | .300 | .300 | .300 | .300 | .300 |
| MICHIGAN | .300 | .300 | .300 | .300 | .300 | .632 | .632 | .632 |
| a MINNESOTA | .300 | .300 | .300 | .300 | .300 | .300 | .300 | .300 |
| a MISSISSIPPI | .300 | .300 | .300 | .300 | .300 | .300 | .300 | .300 |
| MISSOURI | .300 | .300 | .300 | .300 | .300 | .329 | .329 | .329 |
| a MONTANA | .300 | .300 | .300 | .300 | .300 | .300 | .300 | .300 |
| NEBRASKA | .300 | .300 | .300 | .300 | .300 | .100 | .100 | .100 |
| NEVADA | .300 | .300 | .300 | .300 | .300 | .315 | .315 | .315 |
| NEW HAMPSHIRE | .300 | .300 | .300 | .300 | .300 | .180 | .180 | .180 |
| NEW JERSEY | .300 | .300 | .300 | .300 | .300 | .090 | .090 | .090 |
| NEW MEXICO | .300 | .300 | .300 | .300 | .300 | .070 | .070 | .070 |
| a NEW YORK | .300 | .300 | .300 | .300 | .300 | .300 | .300 | .300 |
| NORTH CAROLINA | .300 | .300 | .300 | .300 | .300 | .236 | .236 | .236 |
| NORTH DAKOTA | .300 | .300 | .300 | .300 | .300 | .390 | .390 | .390 |
| OHIO | .300 | .300 | .300 | .300 | .300 | .269 | .269 | .269 |
| OKLAHOMA | .300 | .300 | .300 | .300 | .300 | .277 | .277 | .277 |
| a OREGON | .300 | .300 | .300 | .300 | .300 | .300 | .300 | .300 |
| PENNSYLVANIA | .300 | .300 | .300 | .300 | .300 | .198 | .198 | .198 |
| a RHODE ISLAND | .300 | .300 | .300 | .300 | .300 | .300 | .300 | .300 |
| SOUTH CAROLINA | .300 | .300 | .300 | .300 | .300 | .167 | .167 | .167 |
| SOUTH DAKOTA | .300 | .300 | .300 | .300 | .300 | .270 | .270 | .270 |
| a TENNESSEE | .300 | .300 | .300 | .300 | .300 | .300 | .300 | .300 |
| TEXAS | .300 | .300 | .300 | .300 | .300 | .240 | .240 | .240 |
| a UTAH | .300 | .300 | .300 | .300 | .300 | .300 | .300 | .300 |
| a VERMONT | .300 | .300 | .300 | .300 | .300 | .300 | .300 | .300 |
| VIRGINIA | .300 | .300 | .300 | .300 | .300 | .191 | .191 | .191 |
| a WASHINGTON | .300 | .300 | .300 | .300 | .300 | .300 | .300 | .300 |
| WEST VIRGINIA | .300 | .300 | .300 | .300 | .300 | .290 | .290 | .290 |
| WISCONSIN | .300 | .300 | .300 | .300 | .300 | .215 | .215 | .215 |
| WYOMING | .300 | .300 | .300 | .300 | .300 | .310 | .310 | .310 |

[a] Default value of 0.300 is used for all years.

# TABLE A-9. PERCENT SULFUR CONTENT OF DISTILLATE OIL INDUSTRIAL

| STATES | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| ALABAMA | .339 | .339 | .255 | .169 | .172 | .193 | .198 | .220 |
| ARIZONA | .464 | .464 | .465 | .310 | .239 | .279 | .256 | .265 |
| ARKANSAS | .332 | .332 | .302 | .247 | .254 | .223 | .222 | .252 |
| CALIFORNIA | .471 | .471 | .490 | .313 | .213 | .274 | .245 | .257 |
| COLORADO | .443 | .443 | .392 | .303 | .316 | .296 | .290 | .290 |
| CONNECTICUT | .325 | .325 | .249 | .241 | .210 | .207 | .219 | .222 |
| DELAWARE | .325 | .325 | .249 | .241 | .210 | .207 | .219 | .222 |
| DISTRICT OF COLUMBIA | .325 | .325 | .249 | .241 | .210 | .207 | .219 | .222 |
| FLORIDA | .339 | .339 | .255 | .169 | .172 | .193 | .198 | .220 |
| GEORGIA | .339 | .339 | .255 | .169 | .172 | .193 | .198 | .220 |
| IDAHO | .457 | .457 | .441 | .308 | .264 | .285 | .267 | .273 |
| ILLINOIS | .330 | .330 | .318 | .273 | .281 | .233 | .230 | .263 |
| INDIANA | .330 | .330 | .318 | .273 | .281 | .233 | .230 | .263 |
| IOWA | .330 | .330 | .318 | .273 | .281 | .233 | .230 | .263 |
| KANSAS | .330 | .330 | .318 | .273 | .281 | .233 | .230 | .263 |
| KENTUCKY | .400 | .400 | .404 | .293 | .245 | .220 | .224 | .243 |
| LOUISIANA | .339 | .339 | .255 | .169 | .172 | .193 | .198 | .220 |
| MAINE | .325 | .325 | .249 | .241 | .210 | .207 | .219 | .222 |
| MARYLAND | .325 | .325 | .249 | .241 | .210 | .207 | .219 | .222 |
| MASSACHUSETTS | .325 | .325 | .249 | .241 | .210 | .207 | .219 | .222 |
| MICHIGAN | .400 | .400 | .404 | .293 | .245 | .220 | .224 | .243 |
| MINNESOTA | .330 | .330 | .318 | .273 | .281 | .233 | .230 | .263 |
| MISSISSIPPI | .339 | .339 | .255 | .169 | .172 | .193 | .198 | .220 |
| MISSOURI | .330 | .330 | .318 | .273 | .281 | .233 | .230 | .263 |
| MONTANA | .443 | .443 | .392 | .303 | .316 | .296 | .290 | .290 |
| NEBRASKA | .386 | .386 | .355 | .288 | .298 | .264 | .260 | .277 |
| NEVADA | .471 | .471 | .490 | .313 | .213 | .274 | .245 | .257 |
| NEW HAMPSHIRE | .325 | .325 | .249 | .241 | .210 | .207 | .219 | .222 |
| NEW JERSEY | .325 | .325 | .249 | .241 | .210 | .207 | .219 | .222 |
| NEW MEXICO | .443 | .443 | .392 | .303 | .316 | .296 | .290 | .290 |
| NEW YORK | .325 | .325 | .249 | .241 | .210 | .207 | .219 | .222 |
| NORTH CAROLINA | .339 | .339 | .255 | .169 | .172 | .193 | .198 | .220 |
| NORTH DAKOTA | .330 | .330 | .318 | .273 | .281 | .233 | .230 | .263 |
| OHIO | .325 | .325 | .249 | .241 | .210 | .207 | .219 | .222 |
| OKLAHOMA | .352 | .352 | .332 | .279 | .288 | .246 | .242 | .268 |
| OREGON | .471 | .471 | .490 | .313 | .213 | .274 | .245 | .257 |
| PENNSYLVANIA | .325 | .325 | .249 | .241 | .210 | .207 | .219 | .222 |
| RHODE ISLAND | .325 | .325 | .249 | .241 | .210 | .207 | .219 | .222 |
| SOUTH CAROLINA | .339 | .339 | .255 | .169 | .172 | .193 | .198 | .220 |
| SOUTH DAKOTA | .330 | .330 | .318 | .273 | .281 | .233 | .230 | .263 |
| TENNESSEE | .339 | .339 | .255 | .169 | .172 | .193 | .198 | .220 |
| TEXAS | .362 | .362 | .305 | .228 | .235 | .229 | .229 | .248 |
| UTAH | .448 | .448 | .412 | .305 | .210 | .292 | .281 | .283 |
| VERMONT | .325 | .325 | .249 | .241 | .210 | .207 | .219 | .222 |
| VIRGINIA | .325 | .325 | .249 | .241 | .213 | .207 | .219 | .222 |
| WASHINGTON | .471 | .471 | .490 | .313 | .213 | .274 | .245 | .257 |
| WEST VIRGINIA | .325 | .325 | .249 | .241 | .210 | .207 | .219 | .222 |
| WISCONSIN | .330 | .330 | .318 | .273 | .281 | .233 | .230 | .263 |
| WYOMING | .443 | .443 | .392 | .303 | .316 | .296 | .290 | .290 |

# TABLE A-10. PERCENT SULFUR CONTENT OF DISTILLATE OIL COMMERCIAL-RESIDENTIAL

| STATES | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| ALABAMA | .339 | .339 | .255 | .169 | .172 | .193 | .198 | .220 |
| ARIZONA | .464 | .464 | .465 | .310 | .239 | .279 | .256 | .265 |
| ARKANSAS | .332 | .332 | .302 | .247 | .254 | .223 | .222 | .252 |
| CALIFORNIA | .471 | .471 | .490 | .313 | .213 | .274 | .245 | .257 |
| COLORADO | .443 | .443 | .392 | .303 | .316 | .296 | .290 | .290 |
| CONNECTICUT | .325 | .325 | .249 | .241 | .210 | .207 | .219 | .222 |
| DELAWARE | .325 | .325 | .249 | .241 | .210 | .207 | .219 | .222 |
| DISTRICT OF COLUMBIA | .325 | .325 | .249 | .241 | .210 | .207 | .219 | .222 |
| FLORIDA | .339 | .339 | .255 | .169 | .172 | .193 | .198 | .220 |
| GEORGIA | .339 | .339 | .255 | .169 | .172 | .193 | .198 | .220 |
| IDAHO | .457 | .457 | .441 | .308 | .264 | .285 | .267 | .273 |
| ILLINOIS | .330 | .330 | .318 | .273 | .281 | .233 | .230 | .263 |
| INDIANA | .330 | .330 | .318 | .273 | .281 | .233 | .230 | .263 |
| IOWA | .330 | .330 | .318 | .273 | .281 | .233 | .230 | .263 |
| KANSAS | .330 | .330 | .318 | .273 | .281 | .233 | .230 | .263 |
| KENTUCKY | .400 | .400 | .404 | .293 | .245 | .220 | .224 | .243 |
| LOUISIANA | .339 | .339 | .255 | .169 | .172 | .193 | .198 | .220 |
| MAINE | .325 | .325 | .249 | .241 | .210 | .207 | .219 | .222 |
| MARYLAND | .325 | .325 | .249 | .241 | .210 | .207 | .219 | .222 |
| MASSACHUSETTS | .325 | .325 | .249 | .241 | .210 | .207 | .219 | .222 |
| MICHIGAN | .400 | .400 | .404 | .293 | .245 | .220 | .224 | .243 |
| MINNESOTA | .330 | .330 | .318 | .273 | .281 | .233 | .230 | .263 |
| MISSISSIPPI | .339 | .339 | .255 | .169 | .172 | .233 | .198 | .220 |
| MISSOURI | .330 | .330 | .318 | .273 | .281 | .233 | .230 | .263 |
| MONTANA | .443 | .443 | .392 | .303 | .316 | .296 | .290 | .290 |
| NEBRASKA | .386 | .386 | .355 | .288 | .298 | .264 | .260 | .277 |
| NEVADA | .471 | .471 | .490 | .313 | .213 | .274 | .245 | .257 |
| NEW HAMPSHIRE | .325 | .325 | .249 | .241 | .210 | .207 | .219 | .222 |
| NEW JERSEY | .325 | .325 | .249 | .241 | .210 | .207 | .219 | .222 |
| NEW MEXICO | .443 | .443 | .392 | .303 | .316 | .296 | .290 | .290 |
| NEW YORK | .325 | .325 | .249 | .241 | .210 | .207 | .219 | .222 |
| NORTH CAROLINA | .339 | .339 | .255 | .169 | .172 | .193 | .198 | .220 |
| NORTH DAKOTA | .330 | .330 | .318 | .273 | .281 | .233 | .230 | .263 |
| OHIO | .325 | .325 | .249 | .241 | .210 | .207 | .219 | .222 |
| OKLAHOMA | .352 | .352 | .332 | .279 | .288 | .246 | .242 | .268 |
| OREGON | .471 | .471 | .490 | .313 | .213 | .274 | .245 | .257 |
| PENNSYLVANIA | .325 | .325 | .249 | .241 | .210 | .207 | .219 | .222 |
| RHODE ISLAND | .325 | .325 | .249 | .241 | .210 | .207 | .219 | .222 |
| SOUTH CAROLINA | .339 | .339 | .255 | .169 | .172 | .193 | .198 | .220 |
| SOUTH DAKOTA | .330 | .330 | .318 | .273 | .281 | .233 | .230 | .263 |
| TENNESSEE | .339 | .339 | .255 | .169 | .172 | .193 | .198 | .220 |
| TEXAS | .362 | .362 | .305 | .228 | .235 | .229 | .229 | .248 |
| UTAH | .448 | .448 | .412 | .305 | .210 | .292 | .281 | .283 |
| VERMONT | .325 | .325 | .249 | .241 | .210 | .207 | .219 | .222 |
| VIRGINIA | .325 | .325 | .249 | .241 | .213 | .207 | .219 | .222 |
| WASHINGTON | .471 | .471 | .490 | .313 | .213 | .274 | .245 | .257 |
| WEST VIRGINIA | .325 | .325 | .249 | .241 | .210 | .207 | .219 | .222 |
| WISCONSIN | .330 | .330 | .318 | .273 | .281 | .233 | .230 | .263 |
| WYOMING | .443 | .443 | .392 | .303 | .316 | .296 | .290 | .290 |

# TABLE A-11. PERCENT SULFUR CONTENT OF RAILROADS-COAL

| STATES | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| ALABAMA | 1.610 | 1.610 | 1.650 | 1.650 | 1.200 | 1.859 | 1.849 | 1.849 |
| ARIZONA | .880 | .880 | 1.200 | 1.200 | .500 | .500 | .512 | .512 |
| ARKANSAS | 3.250 | 3.250 | 2.700 | 2.700 | 3.500 | 1.773 | 2.112 | 2.112 |
| CALIFORNIA | .980 | .980 | .980 | .980 | .606 | .606 | .576 | .576 |
| COLORADO | .500 | .500 | 1.000 | 1.000 | .606 | .742 | .809 | .809 |
| CONNECTICUT | 1.810 | 1.810 | 1.700 | 1.700 | .548 | 2.000 | .000 | .000 |
| DELAWARE | 1.630 | 1.630 | 1.600 | 1.600 | 1.930 | .900 | 2.116 | 2.116 |
| DISTRICT OF COLUMBIA | 1.330 | 1.330 | 1.450 | 1.450 | 1.207 | 1.000 | .900 | .850 |
| FLORIDA | 1.520 | 1.520 | 1.650 | 1.650 | 1.200 | 1.200 | 1.138 | 1.138 |
| GEORGIA | 1.520 | 1.520 | 1.650 | 1.650 | 1.200 | 1.208 | 1.177 | 1.177 |
| IDAHO | .870 | .870 | 1.000 | 1.000 | .661 | .668 | .693 | .693 |
| ILLINOIS | 3.240 | 3.240 | 2.100 | 2.100 | 2.690 | 2.445 | 2.207 | 2.207 |
| INDIANA | 3.000 | 3.000 | 2.250 | 2.250 | 2.393 | 3.247 | 2.560 | 2.560 |
| IOWA | 3.500 | 3.500 | 2.550 | 2.550 | 2.713 | 2.553 | 1.934 | 1.934 |
| KANSAS | 2.920 | 2.920 | 2.550 | 2.550 | 3.500 | 1.700 | 2.101 | 2.101 |
| KENTUCKY | 2.670 | 2.670 | 2.000 | 2.000 | 3.171 | 1.742 | 1.644 | 1.644 |
| LOUISIANA | 3.250 | 3.250 | 2.700 | 2.700 | 3.500 | .000 | 2.331 | 2.331 |
| MAINE | 1.350 | 1.350 | 1.600 | 1.600 | 1.670 | 2.000 | 1.100 | 1.100 |
| MARYLAND | 1.630 | 1.630 | 1.600 | 1.600 | 1.930 | 1.981 | 2.000 | 2.000 |
| MASSACHUSETTS | 1.550 | 1.550 | 1.300 | 1.300 | 1.503 | 2.045 | 1.793 | 1.793 |
| MICHIGAN | 2.190 | 2.190 | 1.750 | 1.750 | 1.701 | 1.557 | 1.827 | 1.300 |
| MINNESOTA | 2.210 | 2.210 | 1.950 | 1.950 | 1.942 | 2.121 | 1.069 | 1.069 |
| MISSISSIPPI | 1.610 | 1.610 | 1.650 | 1.650 | 1.200 | 1.055 | 2.507 | 2.507 |
| MISSOURI | 3.390 | 3.390 | 2.450 | 2.450 | 2.795 | 2.685 | 2.467 | 2.467 |
| MONTANA | .870 | .870 | 1.000 | 1.000 | .661 | .685 | .698 | .698 |
| NEBRASKA | 2.920 | 2.920 | 2.550 | 2.550 | 3.500 | .808 | .700 | .700 |
| NEVADA | .880 | .880 | 1.200 | 1.200 | .500 | .590 | .600 | .600 |
| NEW HAMPSHIRE | 1.350 | 1.350 | 1.600 | 1.600 | 1.670 | 2.000 | 2.100 | 2.100 |
| NEW JERSEY | 1.580 | 1.580 | 1.750 | 1.750 | 1.607 | 2.642 | 1.505 | 1.505 |
| NEW MEXICO | .850 | .850 | 1.200 | 1.200 | .500 | .000 | .575 | .575 |
| NEW YORK | 1.620 | 1.620 | 1.650 | 1.650 | 1.881 | 2.059 | 2.103 | 2.103 |
| NORTH CAROLINA | 1.420 | 1.420 | 1.150 | 1.150 | 1.200 | .901 | 1.103 | 1.103 |
| NORTH DAKOTA | .400 | .400 | 1.100 | 1.100 | .611 | .600 | .700 | .700 |
| OHIO | 2.520 | 2.520 | 2.300 | 2.300 | 2.453 | 2.109 | 2.511 | 2.511 |
| OKLAHOMA | 3.250 | 3.250 | 2.700 | 2.700 | 3.500 | 1.411 | 2.107 | 2.107 |
| OREGON | .810 | .810 | .000 | .000 | .558 | .685 | .773 | .773 |
| PENNSYLVANIA | 1.760 | 1.760 | 1.650 | 1.650 | 2.060 | 1.808 | 2.112 | 2.112 |
| RHODE ISLAND | 1.350 | 1.350 | 1.600 | 1.600 | 1.670 | 2.000 | 1.800 | 1.800 |
| SOUTH CAROLINA | 1.450 | 1.450 | 1.200 | 1.200 | 1.200 | .900 | 1.099 | 1.099 |
| SOUTH DAKOTA | .400 | .400 | 1.100 | 1.100 | .611 | .676 | .702 | .702 |
| TENNESSEE | 1.810 | 1.810 | 1.900 | 1.900 | 1.860 | 1.408 | 1.951 | 1.951 |
| TEXAS | 3.250 | 3.250 | 2.700 | 2.700 | 3.500 | 1.633 | 1.792 | 1.792 |
| UTAH | .880 | .880 | 1.050 | 1.050 | .537 | .602 | .608 | .608 |
| VERMONT | 1.350 | 1.350 | 1.600 | 1.600 | 1.670 | 1.670 | 1.670 | 1.670 |
| VIRGINIA | 1.330 | 1.330 | 1.200 | 1.200 | 1.200 | .881 | 1.140 | 1.140 |
| WASHINGTON | .810 | .810 | .000 | .000 | .558 | .611 | .678 | .678 |
| WEST VIRGINIA | 1.550 | 1.550 | 1.950 | 1.950 | 1.483 | 1.620 | 1.737 | 1.737 |
| WISCONSIN | 2.810 | 2.810 | 1.900 | 1.900 | 2.131 | 1.851 | 2.065 | 2.065 |
| WYOMING | .820 | .820 | 1.150 | 1.150 | .700 | .700 | .697 | .697 |

# TABLE A-12. PERCENT SULFUR CONTENT OF COKE PLANTS

| STATES | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| ALABAMA | 1.550 | 1.550 | 1.100 | 1.100 | .800 | .969 | .935 | .935 |
| ARIZONA | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 |
| ARKANSAS | 1.570 | 1.570 | .000 | .000 | .800 | .000 | .000 | .000 |
| CALIFORNIA | 1.720 | 1.720 | .700 | .700 | .700 a | .700 a | .743 | .743 |
| COLORADO | .500 | .500 | .700 | .700 | .709 | .699 | .683 | .683 |
| CONNECTICUT | 1.200 | 1.200 | 1.000 | 1.000 | .000 | .000 | .000 | .000 |
| DELAWARE | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 |
| DISTRICT OF COLUMBIA | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 |
| FLORIDA | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 |
| GEORGIA | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 |
| IDAHO | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 |
| ILLINOIS | 1.550 | 1.550 | .700 | .700 | .800 | .596 | .883 | .883 |
| INDIANA | 1.280 | 1.280 | .700 | .700 | .800 | .841 | .869 | .869 |
| IOWA | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 |
| KANSAS | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 |
| KENTUCKY | 1.360 | 1.360 | 1.000 | 1.000 | .800 | .877 | .790 | .790 |
| LOUISIANA | 1.570 | 1.570 | 1.000 a | .000 | .800 | .000 | .000 | .000 |
| MAINE | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 |
| MARYLAND | 2.760 | 2.760 | 1.000 | 1.000 | .886 | .772 | 1.097 | 1.097 |
| MASSACHUSETTS | 1.340 | 1.340 | 1.300 a | .000 | .000 | .000 | .000 | .000 |
| MICHIGAN | 1.390 | 1.390 | .800 | .800 | .800 | .425 | .802 | .802 |
| MINNESOTA | 1.350 | 1.350 | .800 | .800 | .800 | .830 | .748 | .748 |
| MISSISSIPPI | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 |
| MISSOURI | 1.000 a | 1.000 a | 1.000 | 1.000 | .800 | .794 | .772 | .772 |
| MONTANA | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 |
| NEBRASKA | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 |
| NEVADA | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 |
| NEW HAMPSHIRE | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 |
| NEW JERSEY | 1.470 | 1.470 | 1.000 | 1.000 | 1.300 | .000 | .800 | .800 |
| NEW MEXICO | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 |
| NEW YORK | 1.810 | 1.810 | 1.000 | 1.000 | 1.291 | .969 | 1.005 | 1.005 |
| NORTH CAROLINA | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 |
| NORTH DAKOTA | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 |
| OHIO | 1.540 | 1.540 | 1.100 | 1.100 | .996 | 1.061 | .929 | .929 |
| OKLAHOMA | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 |
| OREGON | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 |
| PENNSYLVANIA | 1.740 | 1.740 | 1.300 | 1.300 | 1.104 | 1.195 | 1.101 | 1.101 |
| RHODE ISLAND | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 |
| SOUTH CAROLINA | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 |
| SOUTH DAKOTA | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 |
| TENNESSEE | 1.470 | 1.470 | 1.000 | 1.000 | .800 | .900 | 1.236 | 1.236 |
| TEXAS | 1.570 | 1.570 | 1.000 | 1.000 | .800 | .885 | .909 | .909 |
| UTAH | .500 | .500 | .700 | .700 | .700 a | .700 a | .689 | .689 |
| VERMONT | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 |
| VIRGINIA | 1.470 | 1.470 | .600 | .600 | .800 | .000 | .700 | .700 |
| WASHINGTON | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 |
| WEST VIRGINIA | 1.800 | 1.800 | 1.200 | 1.200 | 1.084 | 1.236 | .956 | .956 |
| WISCONSIN | 1.330 | 1.330 | .800 | .800 | .800 | .800 | .841 | .841 |
| WYOMING | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 |

[a] Default value.

TABLE A-13. FOOTNOTES TO SULFUR CONTENT DATA

| Source Category | YEAR | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
| | Footnote | | | | | | | |
| Bituminous Coal | | | | | | | | |
| Electric Utilities | m | p | q | f,k | q | q | q | d |
| Industrial Boilers | m | p | q | j,k | h,l | g | a | i |
| Commercial-Residential | m | p | q | j,k | h,l | g | a | i |
| Residual Oil | | | | | | | | |
| Electric Utilities | n | n | n | n | e | e | e | c,e |
| Industrial Boilers | m | b | b | b | b | b | b | b |
| Commercial-Residential | m | b | b | b | b | b | b | b |
| Distillate Oil | | | | | | | | |
| Electric Utilities | r | r | r | r | r | s | s | s |
| Industrial | m | b | b | b | b | b | b | b |
| Commercial-Residential | m | b | b | b | b | b | b | b |
| Coke Plants | m | q | o | k | h,l | g | a | i |

[a]Calculated a weighted average sulfur content based on the average sulfur content by consumer use and district of origin reported in Reference 66, p. 20, Table 4 and the coal distribution data, reported in Reference 11, p. 29-72, Table III.

[b]Average sulfur content was given by marketing districts. The states contained within each district were assigned the average for the district. Those states which overlapped districts were approximately divided according to the area in each district. The average sulfur content was established by weighing the sulfur content of each district according to the area of the state in each district.

[c]Based on fuel oil receipts.

[d]Based on coal receipts.

[e]Since sulfur content is reported for residual and distillate oil combined, the sulfur content of residual oil alone was calculated knowing the amount of each oil type that was used and the average sulfur content of distillate oil.

[f]The percent sulfur for electric utilities was adjusted by adding 0.3 percent to each number to account for the use of raw coal. This was done because the sulfur contents presented in the reference (no. 63, p.14) may be slightly lower (by about 0.3 percent) than the actual sulfur content of coals distributed. This is because the sulfur level was established on the basis of cleaned coals, and a substantial part of the shipments to utilities is raw coal which has not been subjected to cleaning processes.

[g]Calculated a weighted average sulfur content based on the average sulfur content reported by consumer use and district of origin, reported in Reference 66, p. 17, Table 4 and the coal distribution data, reported in Reference 67, p. 8-41, Table 1.

[h]Calculated weighted average sulfur content based on the average sulfur content by consumer use and district of origin, reported in Reference 69, p. 384, Table 41 and the coal distribution data, reported in Reference 68, p. 8-31, Table I.

[i]Since 1980 data was unavailable for industrial, commercial-residential, and coke plant data, 1978 data was used instead.

TABLE A-13. FOOTNOTES TO SULFUR CONTENT DATA (concluded)

[j]Percent sulfur content for industrial and commercial-residential was calculated for each state as follows based on Reference 63, p. 17:

$$\% S = \frac{1.1 + \% S \text{ utility}}{2}$$

[k]Data reported for 1964 is used for 1965.

[l]Average sulfur content was reported by state of origin in Reference 69. The average sulfur content was assigned to each state within the district in which it was used according to Reference 68.

[m]Same data used as for 1955.

[n]Same data used as for 1970.

[o]Same data used as for 1965.

[p]Estimated by determining the weighted sulfur content by mine according to the average sulfur content reported by seam in Reference 75. If several coal analyses were reported for one seam, the sulfur content values were averaged. The average sulfur content for all mines in a state was weighted according to the mine production reported in Reference 75. The average statewide sulfur content was then apportioned to consumer uses and fiinal destination according to Reference 76.

[q]Average sulfur content is reported for each state by plant.

[r]Average sulfur content was assumed to be 0.250 percent by weight.

[s]Average sulfur content was reported in References 62 and 61 except for 18 states identified in volume II, Appendix A, Table A-8 for which a valve of 0.300 percent was assumed.

# APPENDIX B

# STATE EMISSION FACTORS

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## TABLE B-1. EMISSION FACTORS[a]

| Source Category | $SO_2$ | $NO_x$ |
|---|---|---|
| Bituminous Coal (lb/ton) | | |
| Electric Utilities | 39 S[b,c] | 23[d] |
| Industrial Boilers | 38.5 S[b] | 19[d] |
| Commercial-Residential | 36 S[b] | For 1960-1980: 10[d]<br>For pre 1960: 4.5[d] |
| Anthracite Coal (lb/ton) | | |
| All uses | 39 S | 16.5 |
| Residual Oil (lb/bbl) | | |
| Electric Utilities | 6.716 S | 2.4 |
| Industrial Boilers | 6.678 S | 2.31 |
| Commercial-Residential | 6.678 S | 1.12 |
| Distillate Oil (lb/bbl) | | |
| Electric Utilities | 5.960 S | 3.45 |
| Industrial Boilers | 6.031 S | 1.365 |
| Commercial-Residential | 6.048 S | 0.80 |
| Natural Gas [i] ($lb/10^6$ cu.ft.) | | |
| Electric Utilities | 0.6 | 490 |
| Industrial | 0.6 | 140 |
| Pipelines | 0.6 | 2,500[h] |
| Commercial-Residential | 0.6 | 100 |
| Wood [e] (lb/ton) | | |
| Electric Utilities | 0.148 | 2.8 |
| Industrial | 0.148 | 2.425 |
| Commercial | 0.20 | 1.5 |
| Residential | 0.44 | 2.8 |
| Highway Vehicles | | |
| Gasoline | [f] | [f] |
| Diesel (lb/gal.) | 0.0346 | 0.2927 |
| Other | | |
| Railroads - Coal (lb/ton) | 39 S | 10. |
| - Dist. (lb/bbl) | 2.394 | 15.54 |
| Coke Plants (lb/ton coal) | 5.025 S | 0.04 |
| Vessels [g] - Dist. (lb/bbl) | 1.26 | 15.6 |
| - Res. (lb/bbl) | 10.685 | 15.6 |
| Off Highway Diesel (lb/bb) | 1.305 | 10 |
| Cement Plants (lb/ton cement) | [f] | 2.6 |
| Copper Smelters (lb/ton CV) | 4,636 | 0.56 |
| Lead Smelters (lb/ton Pb) | 595 | 0.0 |
| Zinc Smelters (lb/ton Zn) | 2,200 | 0.0 |
| Wildfires | [f] | [f] |

[a]Factors represent uncontrolled emissions and are applied to fuel consumption as fired.

[b]Expressed as $SO_2$, including $SO_2$, $SO_3$ and gaseous sulfates. On average 97 percent of the fuel sulfur is emitted as $SO_2$, where as only about 0.7 percent of the fuel sulfur is emitted as $SO_3$ and gaseous sulfate. For Texas, North Dakota and Minnesota emission factors for lignite combustion are used. These are 30.0 lb of $SO_2$/ton for all categories, 14.0 lb of $NO_x$/ton for electric utilities, 10.2 lb of $NO_x$/ton for industrial boilers, and 6.8 lb of $NO_x$/ton for commercial-residential categories.

[c]S is the percent sulfur content of the fuel expressed as percent sulfur by weight.

[d]Expressed as $NO_2$. Generally, 95-98 percent volume of the nitrogen oxide present in combustion exhaust is in the form of NO. The rest is $NO_2$.

[e]For 1900 to 1945, 0.2 lb of $SO_2$/ton and 1.5 lb of $NO_x$/ton are used for all categories.

[f]Factors vary by state. Individual state factors are presented in Volume II. Appendix B.

[g]For 1900 to 1945, 10 lb of $SO_2$/ton and 1.75 lb of $NO_x$/ton are used irrespective of the type of fuel oil.

[h]Calculated by weighting the emission factor for reciprocating engines and for gas turbines according to the 1980 fuel consumption reported in NEDS. The factor for reciprocating engines assumes a heating value of 1,050 Btu/scf for natural gas and an average fuel consumption of 7,500 Btu/hp-hr.

[i]Factors are based on an average sulfur content of natural gas of 4,000 $g/10^6 Nm^3$ (2,000 $gr/10^6 scf$).

## TABLE B-2. $SO_2$ EMISSION FACTORS FOR HIGHWAY VEHICLES

| STATE | 1950 a | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| ALABAMA | 2.410 | 2.348 | 2.041 | 2.048 | .160 | .158 | .159 | .161 |
| ARIZONA | 2.410 | 2.348 | 2.041 | 2.048 | .160 | .158 | .159 | .161 |
| ARKANSAS | 2.410 | 2.348 | 2.041 | 2.048 | .160 | .158 | .159 | .161 |
| CALIFORNIA | 2.410 | 2.348 | 2.041 | 2.048 | .160 | .158 | .159 | .161 |
| COLORADO | 2.410 | 2.348 | 2.041 | 2.048 | .160 | .158 | .159 | .161 |
| CONNECTICUT | 2.410 | 2.348 | 2.041 | 2.048 | .160 | .158 | .159 | .161 |
| DELAWARE | 2.410 | 2.348 | 2.041 | 2.048 | .160 | .158 | .159 | .161 |
| DISTRICT OF COLUMBIA | 2.410 | 2.348 | 2.041 | 2.048 | .160 | .158 | .159 | .161 |
| FLORIDA | 2.410 | 2.348 | 2.041 | 2.048 | .160 | .158 | .159 | .161 |
| GEORGIA | 2.410 | 2.348 | 2.041 | 2.048 | .160 | .158 | .159 | .161 |
| IDAHO | 2.410 | 2.348 | 2.041 | 2.048 | .160 | .158 | .159 | .161 |
| ILLINOIS | 2.410 | 2.348 | 2.041 | 2.048 | .160 | .158 | .159 | .161 |
| INDIANA | 2.410 | 2.348 | 2.041 | 2.048 | .160 | .158 | .159 | .161 |
| IOWA | 2.410 | 2.348 | 2.041 | 2.048 | .160 | .158 | .159 | .161 |
| KANSAS | 2.410 | 2.348 | 2.041 | 2.048 | .160 | .158 | .159 | .161 |
| KENTUCKY | 2.410 | 2.348 | 2.041 | 2.048 | .160 | .158 | .159 | .161 |
| LOUISIANA | 2.410 | 2.348 | 2.041 | 2.048 | .160 | .158 | .159 | .161 |
| MAINE | 2.410 | 2.348 | 2.041 | 2.048 | .160 | .158 | .159 | .161 |
| MARYLAND | 2.410 | 2.348 | 2.041 | 2.048 | .160 | .158 | .159 | .161 |
| MASSACHUSETTS | 2.410 | 2.348 | 2.041 | 2.048 | .160 | .158 | .159 | .161 |
| MICHIGAN | 2.410 | 2.348 | 2.041 | 2.048 | .160 | .158 | .159 | .161 |
| MINNESOTA | 2.410 | 2.348 | 2.041 | 2.048 | .160 | .158 | .159 | .161 |
| MISSISSIPPI | 2.410 | 2.348 | 2.041 | 2.048 | .160 | .158 | .159 | .161 |
| MISSOURI | 2.410 | 2.348 | 2.041 | 2.048 | .160 | .158 | .159 | .161 |
| MONTANA | 2.410 | 2.348 | 2.041 | 2.048 | .160 | .158 | .159 | .161 |
| NEBRASKA | 2.410 | 2.348 | 2.041 | 2.048 | .160 | .158 | .159 | .161 |
| NEVADA | 2.410 | 2.348 | 2.041 | 2.048 | .160 | .158 | .159 | .161 |
| NEW HAMPSHIRE | 2.410 | 2.348 | 2.041 | 2.048 | .160 | .158 | .159 | .161 |
| NEW JERSEY | 2.410 | 2.348 | 2.041 | 2.048 | .160 | .158 | .159 | .161 |
| NEW MEXICO | 2.410 | 2.348 | 2.041 | 2.048 | .160 | .158 | .159 | .161 |
| NEW YORK | 2.410 | 2.348 | 2.041 | 2.048 | .160 | .158 | .159 | .161 |
| NORTH CAROLINA | 2.410 | 2.348 | 2.041 | 2.048 | .160 | .158 | .159 | .161 |
| NORTH DAKOTA | 2.410 | 2.348 | 2.041 | 2.048 | .160 | .158 | .159 | .161 |
| OHIO | 2.410 | 2.348 | 2.041 | 2.048 | .160 | .158 | .159 | .161 |
| OKLAHOMA | 2.410 | 2.348 | 2.041 | 2.048 | .160 | .158 | .159 | .161 |
| OREGON | 2.410 | 2.348 | 2.041 | 2.048 | .160 | .158 | .159 | .161 |
| PENNSYLVANIA | 2.410 | 2.348 | 2.041 | 2.048 | .160 | .158 | .159 | .161 |
| RHODE ISLAND | 2.410 | 2.348 | 2.041 | 2.048 | .160 | .158 | .159 | .161 |
| SOUTH CAROLINA | 2.410 | 2.348 | 2.041 | 2.048 | .160 | .158 | .159 | .161 |
| SOUTH DAKOTA | 2.410 | 2.348 | 2.041 | 2.048 | .160 | .158 | .159 | .161 |
| TENNESSEE | 2.410 | 2.348 | 2.041 | 2.048 | .160 | .158 | .159 | .161 |
| TEXAS | 2.410 | 2.348 | 2.041 | 2.048 | .160 | .158 | .159 | .161 |
| UTAH | 2.410 | 2.348 | 2.041 | 2.048 | .160 | .158 | .159 | .161 |
| VERMONT | 2.410 | 2.348 | 2.041 | 2.048 | .160 | .158 | .159 | .161 |
| VIRGINIA | 2.410 | 2.348 | 2.041 | 2.048 | .160 | .158 | .159 | .161 |
| WASHINGTON | 2.410 | 2.348 | 2.041 | 2.048 | .160 | .158 | .159 | .161 |
| WEST VIRGINIA | 2.410 | 2.348 | 2.041 | 2.048 | .160 | .158 | .159 | .161 |
| WISCONSIN | 2.410 | 2.348 | 2.041 | 2.048 | .160 | .158 | .159 | .161 |
| WYOMING | 2.410 | 2.348 | 2.041 | 2.048 | .160 | .158 | .159 | .161 |

[a] Same emission factors are used for all earlier years.

## TABLE B-3. $NO_x$ EMISSION FACTORS FOR RURAL HIGHWAY VEHICLES

| STATE | 1950 a | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| ALABAMA | 5.012 | 4.896 | 4.775 | 4.756 | 4.937 | 4.827 | 4.350 | 3.928 |
| ARIZONA | 4.911 | 4.806 | 4.695 | 4.681 | 4.883 | 4.803 | 4.330 | 3.910 |
| ARKANSAS | 5.012 | 4.896 | 4.775 | 4.756 | 4.937 | 4.827 | 4.350 | 3.928 |
| CALIFORNIA | 5.012 | 4.896 | 4.775 | 4.515 | 4.551 | 4.268 | 3.816 | 3.419 |
| COLORADO | 3.608 | 3.609 | 3.600 | 3.623 | 3.983 | 4.161 | 3.770 | 3.400 |
| CONNECTICUT | 5.012 | 4.896 | 4.775 | 4.756 | 4.937 | 4.827 | 4.350 | 3.928 |
| DELAWARE | 5.012 | 4.896 | 4.775 | 4.663 | 4.937 | 4.827 | 4.350 | 3.988 |
| DISTRICT OF COLUMBIA | 5.012 | 4.896 | 4.775 | 4.663 | 4.937 | 4.827 | 4.350 | 3.988 |
| FLORIDA | 5.012 | 4.896 | 4.775 | 4.663 | 4.937 | 4.827 | 4.350 | 3.988 |
| GEORGIA | 5.012 | 4.896 | 4.775 | 4.663 | 4.937 | 4.827 | 4.350 | 3.988 |
| IDAHO | 4.670 | 4.582 | 4.488 | 4.479 | 4.704 | 4.665 | 4.208 | 3.799 |
| ILLINOIS | 5.012 | 4.896 | 4.775 | 4.756 | 4.937 | 4.827 | 4.350 | 3.928 |
| INDIANA | 5.012 | 4.896 | 4.775 | 4.756 | 4.937 | 4.827 | 4.350 | 3.928 |
| IOWA | 5.012 | 4.896 | 4.775 | 4.756 | 4.937 | 4.827 | 4.350 | 3.928 |
| KANSAS | 5.012 | 4.896 | 4.775 | 4.756 | 4.937 | 4.827 | 4.350 | 3.928 |
| KENTUCKY | 5.012 | 4.896 | 4.775 | 4.756 | 4.937 | 4.827 | 4.350 | 3.928 |
| LOUISIANA | 5.012 | 4.896 | 4.775 | 4.756 | 4.937 | 4.827 | 4.350 | 3.928 |
| MAINE | 5.012 | 4.896 | 4.775 | 4.756 | 4.937 | 4.827 | 4.350 | 3.928 |
| MARYLAND | 5.012 | 4.896 | 4.775 | 4.756 | 4.937 | 4.827 | 4.350 | 3.928 |
| MASSACHUSETTS | 5.012 | 4.896 | 4.775 | 4.756 | 4.937 | 4.827 | 4.350 | 3.928 |
| MICHIGAN | 5.012 | 4.896 | 4.775 | 4.756 | 4.937 | 4.827 | 4.350 | 3.928 |
| MINNESOTA | 5.012 | 4.896 | 4.775 | 4.756 | 4.937 | 4.827 | 4.350 | 3.928 |
| MISSISSIPPI | 5.012 | 4.896 | 4.775 | 4.756 | 4.937 | 4.827 | 4.350 | 3.928 |
| MISSOURI | 5.012 | 4.896 | 4.775 | 4.756 | 4.937 | 4.827 | 4.350 | 3.928 |
| MONTANA | 4.649 | 4.564 | 4.472 | 4.464 | 4.691 | 4.656 | 4.201 | 3.791 |
| NEBRASKA | 5.012 | 4.896 | 4.775 | 4.756 | 4.937 | 4.827 | 4.350 | 3.928 |
| NEVADA | 4.728 | 4.636 | 4.538 | 4.527 | 4.744 | 4.693 | 4.232 | 3.821 |
| NEW HAMPSHIRE | 5.012 | 4.896 | 4.775 | 4.756 | 4.937 | 4.827 | 4.350 | 3.928 |
| NEW JERSEY | 5.012 | 4.896 | 4.775 | 4.756 | 4.937 | 4.827 | 4.350 | 3.928 |
| NEW MEXICO | 3.608 | 3.609 | 3.600 | 3.623 | 3.983 | 4.161 | 3.770 | 3.400 |
| NEW YORK | 5.012 | 4.896 | 4.775 | 4.756 | 4.937 | 4.827 | 4.350 | 3.928 |
| NORTH CAROLINA | 5.012 | 4.896 | 4.775 | 4.756 | 4.937 | 4.827 | 4.350 | 3.928 |
| NORTH DAKOTA | 5.012 | 4.896 | 4.775 | 4.756 | 4.937 | 4.827 | 4.350 | 3.928 |
| OHIO | 5.012 | 4.896 | 4.775 | 4.756 | 4.937 | 4.827 | 4.350 | 3.928 |
| OKLAHOMA | 5.012 | 4.896 | 4.775 | 4.756 | 4.937 | 4.827 | 4.350 | 3.928 |
| OREGON | 5.012 | 4.896 | 4.775 | 4.756 | 4.937 | 4.827 | 4.350 | 3.928 |
| PENNSYLVANIA | 5.012 | 4.896 | 4.775 | 4.756 | 4.937 | 4.827 | 4.350 | 3.928 |
| RHODE ISLAND | 5.012 | 4.896 | 4.775 | 4.756 | 4.937 | 4.827 | 4.350 | 3.928 |
| SOUTH CAROLINA | 5.012 | 4.896 | 4.775 | 4.756 | 4.937 | 4.827 | 4.350 | 3.928 |
| SOUTH DAKOTA | 5.012 | 4.896 | 4.775 | 4.756 | 4.937 | 4.827 | 4.350 | 3.928 |
| TENNESSEE | 5.012 | 4.896 | 4.775 | 4.756 | 4.937 | 4.827 | 4.350 | 3.928 |
| TEXAS | 5.012 | 4.896 | 4.775 | 4.756 | 4.937 | 4.827 | 4.350 | 3.928 |
| UTAH | 3.608 | 3.609 | 3.600 | 3.623 | 3.983 | 4.161 | 3.770 | 3.400 |
| VERMONT | 5.012 | 4.896 | 4.775 | 4.756 | 4.937 | 4.827 | 4.350 | 3.928 |
| VIRGINIA | 5.012 | 4.896 | 4.775 | 4.756 | 4.937 | 4.827 | 4.350 | 3.928 |
| WASHINGTON | 5.012 | 4.896 | 4.775 | 4.756 | 4.937 | 4.827 | 4.350 | 3.928 |
| WEST VIRGINIA | 5.012 | 4.896 | 4.775 | 4.756 | 4.937 | 4.827 | 4.350 | 3.928 |
| WISCONSIN | 5.012 | 4.896 | 4.775 | 4.756 | 4.937 | 4.827 | 4.350 | 3.928 |
| WYOMING | 3.608 | 3.609 | 3.600 | 3.623 | 3.983 | 4.161 | 3.770 | 3.400 |

[a] Same emission factors are used for all earlier years.

## TABLE B-4. $NO_x$ EMISSION FACTORS FOR URBAN HIGHWAY VEHICLES

| STATE | 1950 a | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| ALABAMA | 4.430 | 4.380 | 4.328 | 4.300 | 4.544 | 4.476 | 3.978 | 3.647 |
| ARIZONA | 4.264 | 4.221 | 4.175 | 4.152 | 4.400 | 4.346 | 3.875 | 3.561 |
| ARKANSAS | 4.430 | 4.380 | 4.328 | 4.300 | 4.544 | 4.476 | 3.978 | 3.647 |
| CALIFORNIA | 4.430 | 4.380 | 4.328 | 4.118 | 4.209 | 4.091 | 3.599 | 3.261 |
| COLORADO | 2.636 | 2.653 | 2.666 | 2.691 | 2.987 | 3.068 | 2.856 | 2.709 |
| CONNECTICUT | 4.430 | 4.380 | 4.328 | 4.300 | 4.544 | 4.476 | 3.978 | 3.647 |
| DELAWARE | 4.430 | 4.380 | 4.328 | 4.300 | 4.544 | 4.476 | 3.978 | 3.647 |
| DISTRICT OF COLUMBIA | 4.430 | 4.380 | 4.328 | 4.300 | 4.544 | 4.476 | 3.978 | 3.647 |
| FLORIDA | 4.430 | 4.380 | 4.328 | 4.300 | 4.544 | 4.476 | 3.978 | 3.647 |
| GEORGIA | 4.430 | 4.380 | 4.328 | 4.300 | 4.544 | 4.476 | 3.978 | 3.647 |
| IDAHO | 4.114 | 4.076 | 4.035 | 4.017 | 4.270 | 4.228 | 3.781 | 3.482 |
| ILLINOIS | 4.430 | 4.380 | 4.328 | 4.300 | 4.544 | 4.476 | 3.978 | 3.647 |
| INDIANA | 4.430 | 4.380 | 4.328 | 4.300 | 4.544 | 4.476 | 3.978 | 3.647 |
| IOWA | 4.430 | 4.380 | 4.328 | 4.300 | 4.544 | 4.476 | 3.978 | 3.647 |
| KANSAS | 4.430 | 4.380 | 4.328 | 4.300 | 4.544 | 4.476 | 3.978 | 3.647 |
| KENTUCKY | 4.430 | 4.380 | 4.328 | 4.300 | 4.544 | 4.476 | 3.978 | 3.647 |
| LOUISIANA | 4.430 | 4.380 | 4.328 | 4.300 | 4.544 | 4.476 | 3.978 | 3.647 |
| MAINE | 4.430 | 4.380 | 4.328 | 4.300 | 4.544 | 4.476 | 3.978 | 3.647 |
| MARYLAND | 4.430 | 4.380 | 4.328 | 4.300 | 4.544 | 4.476 | 3.978 | 3.647 |
| MASSACHUSETTS | 4.430 | 4.380 | 4.328 | 4.300 | 4.544 | 4.476 | 3.978 | 3.647 |
| MICHIGAN | 4.430 | 4.380 | 4.328 | 4.300 | 4.544 | 4.476 | 3.978 | 3.647 |
| MINNESOTA | 4.430 | 4.380 | 4.328 | 4.300 | 4.544 | 4.476 | 3.978 | 3.647 |
| MISSISSIPPI | 4.430 | 4.380 | 4.328 | 4.300 | 4.544 | 4.476 | 3.978 | 3.647 |
| MISSOURI | 4.430 | 4.380 | 4.328 | 4.300 | 4.544 | 4.476 | 3.978 | 3.647 |
| MONTANA | 4.111 | 4.073 | 4.032 | 4.014 | 4.266 | 4.225 | 3.779 | 3.480 |
| NEBRASKA | 4.430 | 4.380 | 4.328 | 4.300 | 4.544 | 4.476 | 3.978 | 3.647 |
| NEVADA | 4.039 | 4.004 | 3.966 | 3.950 | 4.204 | 4.169 | 3.733 | 3.443 |
| NEW HAMPSHIRE | 4.430 | 4.380 | 4.328 | 4.300 | 4.544 | 4.476 | 3.978 | 3.647 |
| NEW JERSEY | 4.430 | 4.380 | 4.328 | 4.300 | 4.544 | 4.476 | 3.978 | 3.647 |
| NEW MEXICO | 2.636 | 2.653 | 2.666 | 2.691 | 2.987 | 3.068 | 2.856 | 2.709 |
| NEW YORK | 4.430 | 4.380 | 4.328 | 4.300 | 4.544 | 4.476 | 3.978 | 3.647 |
| NORTH CAROLINA | 4.430 | 4.380 | 4.328 | 4.300 | 4.544 | 4.476 | 3.978 | 3.647 |
| NORTH DAKOTA | 4.430 | 4.380 | 4.328 | 4.300 | 4.544 | 4.476 | 3.978 | 3.647 |
| OHIO | 4.430 | 4.380 | 4.328 | 4.300 | 4.544 | 4.476 | 3.978 | 3.647 |
| OKLAHOMA | 4.430 | 4.380 | 4.328 | 4.300 | 4.544 | 4.476 | 3.978 | 3.647 |
| OREGON | 4.430 | 4.380 | 4.328 | 4.300 | 4.544 | 4.476 | 3.978 | 3.647 |
| PENNSYLVANIA | 4.430 | 4.380 | 4.328 | 4.300 | 4.544 | 4.476 | 3.978 | 3.647 |
| RHODE ISLAND | 4.430 | 4.380 | 4.328 | 4.300 | 4.544 | 4.476 | 3.978 | 3.647 |
| SOUTH CAROLINA | 4.430 | 4.380 | 4.328 | 4.300 | 4.544 | 4.476 | 3.978 | 3.647 |
| SOUTH DAKOTA | 4.430 | 4.380 | 4.328 | 4.300 | 4.544 | 4.476 | 3.978 | 3.647 |
| TENNESSEE | 4.430 | 4.380 | 4.328 | 4.300 | 4.544 | 4.476 | 3.978 | 3.647 |
| TEXAS | 4.430 | 4.380 | 4.328 | 4.300 | 4.544 | 4.476 | 3.978 | 3.647 |
| UTAH | 2.636 | 2.653 | 2.666 | 2.691 | 2.987 | 3.068 | 2.856 | 2.709 |
| VERMONT | 4.430 | 4.380 | 4.328 | 4.300 | 4.544 | 4.476 | 3.978 | 3.647 |
| VIRGINIA | 4.430 | 4.380 | 4.328 | 4.300 | 4.544 | 4.476 | 3.978 | 3.647 |
| WASHINGTON | 4.430 | 4.380 | 4.328 | 4.300 | 4.544 | 4.476 | 3.978 | 3.647 |
| WEST VIRGINIA | 4.430 | 4.380 | 4.328 | 4.300 | 4.544 | 4.476 | 3.978 | 3.647 |
| WISCONSIN | 4.430 | 4.380 | 4.328 | 4.300 | 4.544 | 4.476 | 3.978 | 3.647 |
| WYOMING | 2.636 | 2.653 | 2.666 | 2.691 | 2.987 | 3.068 | 2.856 | 2.709 |

[a] Same emission factors are used for all earlier years.

TABLE B-5. $SO_2$ EMISSION FACTORS BY STATE FOR CEMENT PLANTS (lb/ton)[a]

| STATES | 1950[b] | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| ALABAMA | 14.383 | 14.383 | 14.366 | 14.473 | 13.687 | 15.100 | 13.853 | 14.010 |
| ARIZONA | 11.278 | 11.278 | 11.670 | 11.670 | 10.812 | 10.200 | 10.200 | 10.200 |
| ARKANSAS | 10.200 | 10.200 | 10.200 | 10.200 | 10.200 | 10.200 | 10.200 | 10.200 |
| CALIFORNIA | 11.057 | 11.057 | 11.022 | 10.879 | 10.953 | 10.896 | 10.835 | 10.809 |
| COLORADO | 11.872 | 11.872 | 12.888 | 12.873 | 11.877 | 12.075 | 12.091 | 12.091 |
| CONNECTICUT | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 |
| DELAWARE | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 |
| DISTRICT OF COLUMBIA | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 |
| FLORIDA | 17.289 | 17.289 | 17.309 | 17.839 | 17.630 | 16.810 | 16.209 | 16.301 |
| GEORGIA | 14.389 | 14.389 | 14.287 | 14.671 | 14.811 | 15.127 | 14.720 | 15.284 |
| IDAHO | 10.200 | 10.200 | 10.200 | 10.200 | 10.200 | 10.200 | 10.200 | 10.200 |
| ILLINOIS | 23.072 | 23.072 | 20.101 | 20.101 | 19.918 | 18.121 | 18.579 | 18.579 |
| INDIANA | 23.968 | 23.968 | 25.612 | 25.612 | 22.263 | 29.681 | 23.955 | 23.955 |
| IOWA | 29.585 | 29.585 | 27.667 | 27.667 | 19.756 | 16.612 | 22.167 | 22.167 |
| KANSAS | 11.713 | 11.713 | 12.457 | 12.457 | 13.297 | 10.200 | 12.058 | 12.058 |
| KENTUCKY | 23.641 | 23.641 | 22.778 | 22.785 | 22.644 | 18.076 | 18.928 | 18.955 |
| LOUISIANA | 10.200 | 10.200 | 10.200 | 10.200 | 10.200 | 10.200 | 10.200 | 10.200 |
| MAINE | 10.200 | 10.200 | 10.200 | 10.200 | 10.200 | 10.200 | 10.200 | 10.200 |
| MARYLAND | 10.200 | 10.200 | 10.200 | 10.200 | 10.200 | 10.200 | 10.200 | 10.200 |
| MASSACHUSETTS | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 |
| MICHIGAN | 19.721 | 19.721 | 22.187 | 22.187 | 19.537 | 16.269 | 19.105 | 19.105 |
| MINNESOTA | 10.200 | 10.200 | 10.200 | 10.200 | 10.200 | 10.200 | 10.200 | 10.200 |
| MISSISSIPPI | 10.200 | 10.200 | 10.200 | 10.200 | 10.200 | 10.200 | 10.200 | 10.200 |
| MISSOURI | 21.654 | 21.654 | 18.652 | 18.652 | 20.543 | 19.411 | 18.100 | 18.100 |
| MONTANA | 10.200 | 10.200 | 10.200 | 10.200 | 10.200 | 10.200 | 10.200 | 10.200 |
| NEBRASKA | 13.235 | 13.235 | 14.726 | 14.726 | 16.412 | 11.442 | 11.442 | 11.442 |
| NEVADA | 10.200 | 10.200 | 10.200 | 10.200 | 10.200 | 10.200 | 10.200 | 10.200 |
| NEW HAMPSHIRE | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 |
| NEW JERSEY | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 |
| NEW MEXICO | 10.296 | 10.296 | 10.292 | 10.281 | 10.299 | 10.260 | 10.271 | 10.271 |
| NEW YORK | 16.320 | 16.320 | 15.980 | 16.277 | 15.980 | 16.150 | 15.385 | 16.532 |
| NORTH CAROLINA | 19.047 | 19.047 | 17.633 | 17.797 | 18.136 | 16.779 | 17.112 | 17.353 |
| NORTH DAKOTA | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 |
| OHIO | 24.242 | 24.242 | 25.955 | 25.955 | 25.811 | 27.209 | 28.044 | 28.044 |
| OKLAHOMA | 10.200 | 10.200 | 10.200 | 10.200 | 10.200 | 10.200 | 10.200 | 10.200 |
| OREGON | 10.200 | 10.200 | 10.200 | 10.200 | 10.200 | 10.200 | 10.200 | 10.200 |
| PENNSYLVANIA | 21.926 | 21.926 | 20.333 | 20.393 | 23.187 | 18.440 | 22.633 | 22.861 |
| RHODE ISLAND | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 |
| SOUTH CAROLINA | 10.921 | 10.921 | 10.897 | 10.967 | 11.004 | 11.070 | 10.990 | 11.093 |
| SOUTH DAKOTA | 10.200 | 10.200 | 10.200 | 10.200 | 10.200 | 10.200 | 10.200 | 10.200 |
| TENNESSEE | 29.660 | 29.660 | 22.483 | 22.483 | 18.967 | 16.200 | 20.156 | 20.156 |
| TEXAS | 10.539 | 10.539 | 10.537 | 10.537 | 10.450 | 10.200 | 10.200 | 10.450 |
| UTAH | 11.705 | 11.705 | 11.780 | 11.780 | 10.952 | 11.106 | 11.105 | 11.105 |
| VERMONT | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 |
| VIRGINIA | 18.694 | 18.694 | 18.420 | 18.420 | 18.468 | 16.207 | 17.454 | 17.454 |
| WASHINGTON | 13.191 | 13.191 | 13.087 | 12.658 | 12.720 | 12.618 | 12.396 | 12.448 |
| WEST VIRGINIA | 10.200 | 10.200 | 10.200 | 10.200 | 10.200 | 10.200 | 10.200 | 10.200 |
| WISCONSIN | 16.065 | 16.065 | 16.745 | 16.915 | 17.722 | 16.575 | 16.362 | 16.362 |
| WYOMING | 15.200 | 15.200 | 18.077 | 18.077 | 14.995 | 14.995 | 14.968 | 14.968 |

[a] Based on individual plant capacity and fuel type used as reported in Reference 35. An average statewide emission factor is then calculated for each State according to state production.

[b] Same emission factors are used for all earlier years.

TABLE B-6. COMPONENTS OF THE $SO_2$ EMISSION FACTORS FOR CEMENT PLANTS

| States | $SO_2$ (lb/ton) Coal Factor | $SO_2$ (lb/ton) Oil Factor | $SO_2$ (lb/ton) Mineral Source Factor |
|---|---|---|---|
| Alabama | 1.875 | .715 | 10.200 |
| Arizona | 1.225 | .000 | 10.200 |
| Arkansas | .000 | .000 | 10.200 |
| California | .000 | .435 | 10.200 |
| Colorado | 2.555 | .065 | 10.200 |
| Connecticut | .000 | .000 | .000 |
| Delaware | .000 | .000 | .000 |
| District of Columbia | .000 | .000 | .000 |
| Florida | 1.095 | 3.535 | 10.200 |
| Georgia | .145 | 2.565 | 10.200 |
| Idaho | .000 | .000 | 10.200 |
| Illinois | 4.715 | .000 | 10.200 |
| Indiana | 6.850 | .000 | 10.200 |
| Iowa | 6.850 | .000 | 10.200 |
| Kansas | .885 | .000 | 10.200 |
| Kentucky | 6.195 | .130 | 10.200 |
| Louisiana | NA | NA | 10.200 |
| Maine | NA | NA | 10.200 |
| Maryland | NA | NA | 10.200 |
| Massachusetts | .000 | .000 | .000 |
| Michigan | 6.850 | .000 | 10.200 |
| Minnesota | NA | NA | 10.200 |
| Mississippi | .000 | .000 | 10.200 |
| Missouri | 3.450 | .000 | 10.200 |
| Montana | .000 | .000 | 10.200 |
| Nebraska | 1.775 | .000 | 10.200 |
| Nevada | NA | NA | 10.200 |
| New Hampshire | .000 | .000 | .000 |
| New Jersey | .000 | .000 | .000 |
| New Mexico | .000 | .045 | 10.200 |
| New York | .000 | .045 | 10.200 |
| North Carolina | 5.035 | 1.095 | 10.200 |
| North Dakota | .000 | .000 | .000 |
| Ohio | 6.850 | .000 | 10.200 |
| Oklahoma | .000 | .000 | 10.200 |
| Oregon | NA | NA | 10.200 |
| Pennsylvania | 5.445 | .845 | 10.200 |
| Rhode Island | .000 | .000 | .000 |
| South Carolina | .000 | .564 | 10.200 |
| South Dakota | NA | NA | 10.200 |
| Tennessee | 6.465 | .000 | 10.200 |
| Texas | .125 | .000 | 10.200 |
| Utah | 1.505 | .000 | 10.200 |
| Vermont | .000 | .000 | .000 |
| Virginia | 6.850 | .000 | 10.200 |
| Washington | .500 | 1.300 | 10.200 |
| West Virginia | NA | NA | 10.200 |
| Wisconsin | .000 | 4.250 | 10.200 |
| Wyoming | 6.850 | .000 | 10.200 |

## TABLE B-7. $NO_x$ EMISSION FACTORS BY STATE FOR CEMENT PLANTS (lb/ton)

| STATES | 1950 | 1955 | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
|---|---|---|---|---|---|---|---|---|
| ALABAMA | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 |
| ARIZONA | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 |
| ARKANSAS | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 |
| CALIFORNIA | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 |
| COLORADO | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 |
| CONNECTICUT | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 |
| DELAWARE | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 |
| DISTRICT OF COLUMBIA | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 |
| FLORIDA | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 |
| GEORGIA | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 |
| IDAHO | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 |
| ILLINOIS | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 |
| INDIANA | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 |
| IOWA | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 |
| KANSAS | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 |
| KENTUCKY | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 |
| LOUISIANA | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 |
| MAINE | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 |
| MARYLAND | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 |
| MASSACHUSETTS | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 |
| MICHIGAN | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 |
| MINNESOTA | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 |
| MISSISSIPPI | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 |
| MISSOURI | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 |
| MONTANA | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 |
| NEBRASKA | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 |
| NEVADA | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 |
| NEW HAMPSHIRE | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 |
| NEW JERSEY | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 |
| NEW MEXICO | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 |
| NEW YORK | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 |
| NORTH CAROLINA | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 |
| NORTH DAKOTA | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 |
| OHIO | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 |
| OKLAHOMA | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 |
| OREGON | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 |
| PENNSYLVANIA | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 |
| RHODE ISLAND | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 |
| SOUTH CAROLINA | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 |
| SOUTH DAKOTA | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 |
| TENNESSEE | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 |
| TEXAS | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 |
| UTAH | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 |
| VERMONT | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 |
| VIRGINIA | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 |
| WASHINGTON | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 |
| WEST VIRGINIA | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 |
| WISCONSIN | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 |
| WYOMING | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 |

TABLE B-8 . WILDFIRE EMISSION FACTORS

| State | 1000 tons/1000 acres burned[a] $SO_2$ | $NO_x$ |
|---|---|---|
| MT, ND | 0.0045 | 0.12 |
| SD, NE, KS, WY, CO | 0.0023 | 0.060 |
| AZ, NM | 0.00075 | 0.020 |
| NV, ID, UT | 0.0006 | 0.016 |
| CA | 0.0014 | 0.036 |
| WA, OR | 0.0045 | 0.12 |
| TX, OK, LA, AR, KY, MS, AL, GA, SC, NC, VA, DE, FL, DC | 0.00068 | 0.018 |
| PA, MN, IO, WI, IL, MO, OH, IN, MD, NJ, MI, PA, NY, CT, MA, RI, VT, NH, ME | 0.00083 | 0.022 |

[a]Factors are taken from AP-42.

# APPENDIX C

# PRIMARY COPPER, ZINC AND LEAD PRODUCTION AND EMISSIONS

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TABLE C-1. MINE PRODUCTION OF RECOVERABLE COPPER BY STATE 1900-1950 (short tons)

| STATE | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 | 1950 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| WESTERN STATES | | | | | | | | | | | |
| Arizona | 59159 | 113427 | 148625 | 216234 | 276494 | 361327 | 285449 | 139260 | 287267 | 287203 | 403381 |
| California | 14256 | 8349 | 22880 | 18829 | 5911 | 23472 | 13131 | 815 | 6546 | 6473 | 646 |
| Colorado | 3913 | 4702 | 4654 | 3636 | 2141 | 1582 | 6472 | 7170 | 13186 | 1485 | 3141 |
| Idaho | 145 | 3661 | 3439 | 3109 | 961 | 1572 | 1357 | 1062 | 3690 | 1548 | 2107 |
| Montana | 135369 | 157375 | 141539 | 134132 | 88872 | 135383 | 99398 | 78880 | 129071 | 38506 | 54478 |
| Nevada | 204 | 207 | 32247 | 33879 | 27790 | 38569 | 43738 | 36122 | 78621 | 52595 | 52569 |
| New Mexico | 2085 | 2667 | 1892 | 31489 | 26888 | 38234 | 37094 | 2280 | 70484 | 56571 | 66388 |
| Oregon | 0 | 423 | 11 | 399 | 1265 | 63 | 115 | 186 | 101 | 1 | 19 |
| South Dakota | 7 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 6 | 0 | 0 |
| Utah | 9177 | 27042 | 62593 | 87589 | 55179 | 121365 | 102885 | 60487 | 248732 | 226376 | 278638 |
| Washington | 0 | 117 | 33 | 452 | 1063 | 592 | 702 | 41 | 10511 | 5821 | 5857 |
| Wyoming | 2102 | 115 | 109 | 176 | 12 | 0 | 15 | 1 | 2 | 0 | 0 |
| CENTRAL STATES | | | | | | | | | | | |
| Michigan | 72731 | 115144 | 110731 | 119478 | 76742 | 69015 | 71493 | 36906 | 45743 | 30401 | 25608 |
| Missouri | 0 | 0 | 0 | 0 | 267 | 6 | 1 | 43 | 819 | 3399 | 2982 |
| Texas | 0 | 0 | 0 | 0 | 7 | 0 | 83 | 9 | 33 | 55 | 2 |
| EASTERN STATES | | | | | | | | | | | |
| Alabama | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 0 |
| Georgia | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 13 | 0 | 0 |
| North Carolina | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pennsylvania | 0 | 0 | 0 | 0 | 309 | 281 | 1531 | 0 | 0 | 0 | 0 |
| South Carolina | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 |
| Tennessee [a] | 2410 | 7567 | 9171 | 9337 | 8364 | 9895 | 0 | 10435 | 14195 | 12385 | 14497 |
| Vermont | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Virginia | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| UNDISTRIBUTED | 0 | 0 | 0 | 0 | 24 | 57 | 16 | 0 | 0 | 0 | 0 |

a Tennessee includes Pennsylvania and Vermont.

TABLE C-2. TOTAL NATIONAL $SO_2$ EMISSIONS CONVERTED TO SULFURIC ACID FROM COPPER SMELTERS 1900-1950 (1,000 tons)

| | SO2 EMISSIONS CONVERTED TO SULFURIC ACID | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 | 1950 |
| | 100 [b] | 100 [b] | 100 [b] | 183 | 253 | 300 | 331 | 81 | 129 | 151 | 93 |

b Estimate

TABLE C-3. CONTROLLED $SO_2$ EMISSIONS FROM COPPER SMELTERS 1900-1950
(1,000 tons)

| STATE | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 | 1950 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| WESTERN STATES | | | | | | | | | | | |
| Arizona | 117.5 | 237.2 | 316.9 | 441.2 | 518.8 | 782.2 | 519.4 | 292.5 | 625.2 | 605.6 | 893.4 |
| California | 28.3 | 17.5 | 48.8 | 38.4 | 11.1 | 45.6 | 23.9 | 1.7 | 14.2 | 13.6 | 1.4 |
| Colorado | 7.8 | 9.8 | 9.9 | 7.4 | 4.8 | 3.1 | 11.8 | 15.1 | 28.7 | 3.1 | 7.8 |
| Idaho | 8.3 | 7.7 | 7.3 | 6.3 | 1.8 | 3.1 | 2.5 | 2.2 | 8.8 | 3.3 | 4.7 |
| Montana | 268.9 | 329.1 | 301.8 | 273.7 | 166.7 | 263.8 | 188.9 | 165.7 | 288.9 | 81.2 | 128.7 |
| Nevada | 8.4 | 8.4 | 68.8 | 69.1 | 52.1 | 75.8 | 79.6 | 75.9 | 171.1 | 118.9 | 116.5 |
| New Mexico | 4.1 | 5.6 | 4.8 | 64.1 | 48.9 | 74.3 | 67.5 | 4.8 | 153.4 | 119.3 | 146.9 |
| Oregon | 8.8 | 8.9 | .8 | 8.8 | 2.4 | 8.1 | 8.2 | 8.4 | 8.2 | .8 | .8 |
| South Dakota | .8 | 8.8 | 8.8 | 8.8 | .8 | .8 | 8.8 | 8.8 | .8 | 8.8 | 8.8 |
| Utah | 18.2 | 56.5 | 133.5 | 178.7 | 183.5 | 235.9 | 187.2 | 127.1 | 541.3 | 477.3 | 617.2 |
| Washington | 8.8 | 8.2 | 8.1 | 8.9 | 2.8 | 1.2 | 1.3 | 8.1 | 22.9 | 12.3 | 11.2 |
| Wyoming | 4.2 | 8.2 | 8.2 | 8.4 | .8 | 8.8 | .8 | .8 | .8 | 8.8 | 8.8 |
| CENTRAL STATES | 8.8 | 8.8 | 8.8 | 8.8 | 8.8 | 8.8 | 8.8 | 8.8 | 8.8 | 8.8 | 8.8 |
| Michigan | 144.5 | 248.8 | 236.1 | 243.8 | 144.8 | 134.1 | 138.1 | 77.5 | 99.6 | 64.1 | 56.7 |
| Missouri | 8.8 | 8.8 | 8.8 | 8.8 | 8.5 | .8 | .8 | 8.1 | 1.8 | 7.2 | 6.6 |
| Texas | 8.8 | 8.8 | 8.8 | 8.8 | .8 | 8.8 | 8.2 | .8 | 8.1 | 8.1 | .8 |
| EASTERN STATES | 8.8 | 8.8 | 8.8 | 8.8 | 8.8 | 8.8 | 8.8 | 8.8 | 8.8 | 8.8 | 8.8 |
| Alabama | 8.8 | 8.8 | 8.8 | 8.8 | 8.8 | 8.8 | 8.8 | .8 | 8.8 | 8.8 | 8.8 |
| Georgia | 8.8 | 8.8 | 8.8 | 8.8 | .8 | 8.8 | 8.8 | 8.8 | .8 | 8.8 | 8.8 |
| North Carolina | 8.8 | 8.8 | 8.8 | 8.8 | 8.8 | 8.8 | 8.8 | 8.8 | 8.8 | 8.8 | 8.8 |
| Pennsylvania | 8.8 | 8.8 | 8.8 | 8.8 | 8.6 | 8.5 | 2.8 | 8.8 | 8.8 | 8.8 | 8.8 |
| South Carolina | 8.8 | 8.8 | 8.8 | 8.8 | 8.8 | 8.8 | 8.8 | .8 | 8.8 | 8.8 | 8.8 |
| Tennessee | 4.8 | 15.8 | 19.6 | 19.1 | 15.7 | 19.2 | 8.8 | 21.9 | 38.9 | 26.1 | 32.1 |
| Vermont | 8.8 | 8.8 | 8.8 | 8.8 | 8.8 | 8.8 | 8.8 | 8.8 | 8.8 | 8.8 | 8.8 |
| Virginia | 8.8 | 8.8 | 8.8 | 8.8 | 8.8 | 8.8 | 8.8 | 8.8 | 8.8 | 8.8 | 8.8 |
| UNDISTRIBUTED | 8.8 | 8.8 | 8.8 | 8.8 | .8 | 8.1 | .8 | 8.8 | 8.8 | 8.8 | 8.8 |
| TOTAL EMISSIONS | 599.6 | 921.8 | 1146.9 | 1343.9 | 1072.3 | 1557.4 | 1207.4 | 785.8 | 1978.3 | 1524.1 | 2014.5 |

TABLE C-4. $NO_x$ EMISSIONS FROM COPPER SMELTERS 1900-1950
(1,000 tons)

| STATE | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 | 1950 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| WESTERN STATES | | | | | | | | | | | |
| Arizona | 0.02 | 0.03 | 0.04 | 0.06 | 0.08 | 0.10 | 0.08 | 0.04 | 0.08 | 0.08 | 0.11 |
| California | .00 | .00 | 0.01 | 0.01 | .00 | 0.01 | .00 | .00 | .00 | .00 | .00 |
| Colorado | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| Idaho | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| Montana | 0.04 | 0.04 | 0.04 | 0.04 | 0.02 | 0.04 | 0.03 | 0.02 | 0.04 | 0.01 | 0.02 |
| Nevada | .00 | .00 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.02 | 0.01 | 0.01 |
| New Mexico | .00 | .00 | .00 | 0.01 | 0.01 | 0.01 | 0.01 | .00 | 0.02 | 0.02 | 0.02 |
| Oregon | 0.00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| South Dakota | .00 | 0.00 | 0.00 | 0.00 | .00 | .00 | 0.00 | 0.00 | .00 | 0.00 | 0.00 |
| Utah | .00 | 0.01 | 0.02 | 0.02 | 0.02 | 0.03 | 0.03 | 0.02 | 0.07 | 0.06 | 0.08 |
| Washington | 0.00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| Wyoming | .00 | .00 | .00 | .00 | .00 | 0.00 | .00 | .00 | .00 | 0.00 | 0.00 |
| CENTRAL STATES | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Michigan | 0.02 | 0.03 | 0.03 | 0.03 | 0.02 | 0.02 | 0.02 | 0.01 | 0.01 | 0.01 | 0.01 |
| Missouri | 0.00 | 0.00 | 0.00 | 0.00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| Texas | 0.00 | 0.00 | 0.00 | 0.00 | .00 | 0.00 | .00 | .00 | .00 | .00 | .00 |
| EASTERN STATES | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Alabama | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | .00 | 0.00 | 0.00 | 0.00 |
| Georgia | 0.00 | 0.00 | 0.00 | 0.00 | .00 | 0.00 | 0.00 | 0.00 | .00 | 0.00 | 0.00 |
| North Carolina | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Pennsylvania | 0.00 | 0.00 | 0.00 | 0.00 | .00 | .00 | .00 | 0.00 | 0.00 | 0.00 | 0.00 |
| South Carolina | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | .00 | 0.00 | 0.00 | 0.00 |
| Tennessee | .00 | .00 | .00 | .00 | .00 | .00 | 0.00 | .00 | .00 | .00 | .00 |
| Vermont | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Virginia | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| UNDISTRIBUTED | 0.00 | 0.00 | 0.00 | 0.00 | .00 | .00 | .00 | 0.00 | 0.00 | 0.00 | 0.00 |
| TOTAL EMISSIONS | 0.08 | 0.12 | 0.15 | 0.18 | 0.16 | 0.22 | 0.19 | 0.10 | 0.25 | 0.20 | 0.25 |

TABLE C-5. PRIMARY ZINC SLAB PRODUCTION BY STATE 1900-1960 (short tons)

| STATE | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 | 1950 | 1955 | 1960 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Arkansas | 0 | 0 | 0 | 0 | 31481 | 27145 | 13917 | 10147 | 35497 | 29391 | 20688 | 21481 | 1521 |
| Idaho | 0 | 0 | 0 | 0 | 0 | 0 | 9509 | 12448 | 37477 | 33110 | 53922 | 56625 | 26449 |
| Illinois | 38750 a | 46606 | 73838 | 159958 | 109856 | 109672 | 103331 | 67348 | 101819 | 124904 | 108301 | 102808 | 88291 e |
| Kansas | 63135 | 114287 | 105697 | 101423 | 41044 | 25765 | 13582 | 0 | 0 | 0 | 0 | 0 | 0 |
| Montana | 0 | 0 | 0 | 0 | 0 | 0 | 112908 | 106028 | 149563 | 179251 | 216104 | 207366 | 132290 |
| Oklahoma | 0 | 0 | 43760 | 109208 | 110580 | 138906 | 79742 | 58612 | 96689 | 106115 | 145117 | 160961 | 161894 |
| Pennsylvania | 0 | 0 | 0 | 0 | 74234 | 99899 | 101916 | 119452 | 175352 | 200709 | 162539 | 218469 | 198718 f |
| Missouri | 14741 | 11844 | 5571 | 6754 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Colorado | 0 | 6599 | 6512 | 8767 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| OTHER STATES | 8259 b | 24513 b | 43606 b | 103409 b | 97862 | 171559 | 63040 | 46599 | 78878 | 91081 | 136796 c | 195794 c | 194557 c |

TABLE C-6. TOTAL NATIONAL $SO_2$ EMISSIONS CONVERTED TO SULFURIC ACID FROM ZINC-BLEND ROASTING PLANTS 1900-1960 (1,000 tons)

| | BY-PRODUCT SULFURIC ACID FROM ZINC-BLEND ROASTING PLANTS | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 | 1950 | 1955 | 1960 |
| 100 d | 100 d | 100 d | 246 | 359 | 313 | 272 | 225 | 298 | 398 | 434 | 397 | 583 |

a Includes Indiana.
b East and South combined.
c Texas and West Virginia including Missouri.
d Estimate
e Includes Missouri.
f Includes West Virginia.

TABLE C-7. CONTROLLED $SO_2$ EMISSIONS FROM ZINC SMELTERS 1900-1980 (1,000 tons)

| STATE | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 | 1950 | 1955 | 1960 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Arkansas | 0.0 | 0.0 | 0.0 | 0.0 | 10.2 | 15.0 | 7.7 | 5.7 | 23.4 | 17.0 | 12.1 | 14.8 | 0.7 |
| Colorado | 0.0 | 4.0 | 4.8 | 5.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Idaho | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 5.3 | 7.0 | 24.7 | 19.2 | 31.6 | 39.0 | 12.5 |
| Illinois | 11.5 | 28.4 | 54.1 | 95.5 | 35.5 | 60.8 | 57.2 | 38.1 | 67.1 | 72.4 | 63.5 | 70.7 | 41.9 |
| Indiana | 0.5 | 3.2 | 6.9 | 13.2 | 6.8 | 20.4 | 7.5 | 5.6 | 15.4 | 30.4 | 0.0 | 0.0 | 0.0 |
| Kansas | 18.8 | 69.6 | 78.3 | 60.6 | 13.4 | 14.3 | 7.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Missouri | 4.4 | 7.2 | 4.1 | 4.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Montana | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 62.5 | 60.0 | 98.6 | 103.9 | 126.7 | 142.7 | 62.7 |
| Oklahoma | 0.0 | 0.0 | 32.4 | 65.2 | 36.0 | 77.0 | 44.1 | 33.1 | 63.7 | 61.5 | 85.1 | 110.7 | 76.8 |
| Pennsylvania | 0.0 | 0.0 | 0.0 | 0.0 | 24.2 | 55.4 | 56.4 | 67.5 | 115.6 | 116.4 | 95.3 | 150.3 | 94.2 |
| Texas | 0.8 | 4.9 | 10.6 | 20.2 | 10.3 | 31.1 | 11.4 | 8.6 | 11.0 | 21.6 | 80.2 | 134.7 | 92.2 |
| West Virginia | 1.1 | 6.9 | 14.8 | 28.3 | 14.5 | 43.7 | 16.0 | 12.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| TOTAL EMISSIONS | 37.1 | 124.1 | 206.0 | 292.3 | 150.8 | 317.6 | 275.7 | 237.8 | 419.5 | 442.5 | 494.4 | 662.8 | 381.0 |

| STATE | 1965 [a] | 1970 [a] | 1975 [b] | 1978 [b] | 1980 [b] |
|---|---|---|---|---|---|
| Arkansas | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Colorado | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Idaho | 6.3 | 4.2 | 0.6 | 0.6 | 0.4 |
| Illinois | 21.0 | 13.9 | 0.4 | 0.4 | 0.3 |
| Indiana | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Kansas | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Missouri | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Montana | 31.4 | 20.8 | 0.0 | 0.0 | 0.0 |
| Ohio | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 |
| Oklahoma | 38.5 | 25.5 | 14.8 | 13.5 | 8.9 |
| Pennsylvania | 47.2 | 31.3 | 3.1 | 2.9 | 1.9 |
| Tennessee | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Texas | 46.2 | 30.6 | 14.7 | 13.4 | 8.8 |
| West Virginia | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| TOTAL EMISSIONS | 190.5 | 126.3 | 33.8 | 30.9 | 20.2 |

a Based on 1960 production data
b Based on 1973 data from reference 86 and 83

TABLE C-8. MINE PRODUCTION OF RECOVERABLE LEAD BY STATE 1900-1960 (short tons)

| STATE | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 [a] | 1940 | 1945 | 1950 | 1955 | 1960 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Arizona | 0 | 2091 | 948 | 6953 | 5987 | 11938 | 4246 | 10688 | 13266 | 22867 | 26383 | 9817 | 8495 |
| California | 520 | 116 | 1207 | 5606 | 2260 | 3283 | 1780 | 482 | 1772 | 7224 | 15831 | 8265 | 440 |
| Colorado | 82137 | 56638 | 38542 | 32352 | 17752 | 31483 | 22130 | 7267 | 11476 | 17844 | 27007 | 15805 | 10000 |
| Idaho | 85444 | 99027 | 109951 | 160680 | 117191 | 126521 | 134058 | 91339 | 104834 | 68447 | 100025 | 64163 | 42907 |
| Illinois | 0 | 163 [b] | 263 | 910 | 948 | 1001 | 248 | 294 | 1508 | 3005 | 2729 | 4544 | 3000 |
| Kansas | 0 | 813 [b] | 1300 | 1320 | 8421 | 22775 | 12910 | 11409 | 11927 | 7370 | 9487 | 5498 | 781 |
| Kentucky | 0 | 31 [b] | 50 | 95 | 114 | 152 | 101 | 50 | 360 | 120 | 66 | 0 | 558 |
| Missouri | 0 | 100564 [b] | 161659 | 195634 | 171999 | 211565 | 199632 | 110428 | 172052 | 176575 | 134626 | 125412 | 111948 |
| Montana | 0 | 2207 | 1943 | 4853 | 13231 | 18768 | 10653 | 19059 | 23836 | 9999 | 19617 | 17028 | 4879 |
| Nevada | 0 | 2206 | 2246 | 7664 | 8650 | 12238 | 11529 | 10712 | 7499 | 6275 | 9408 | 3291 | 987 |
| New Mexico | 0 | 1232 | 1890 | 2157 | 1123 | 3210 | 10378 | 6626 | 3822 | 7662 | 4150 | 3296 | 1996 |
| New York | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1973 | 862 | 1484 | 1037 | 775 |
| North Carolina | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 2285 | 0 | 0 | 2 | 424 |
| Oklahoma | 0 | 0 | 1805 | 4346 | 68494 | 79946 | 23052 | 25427 | 21240 | 12664 | 20724 | 14126 | 936 |
| Oregon | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 17 | 3 | 0 |
| South Dakota | 0 | 6 [b] | 8 | 5 | 6 | 0 | 0 | 0 | 7 | 0 | 0 | 0 | 0 |
| Tennessee | 0 | 0 | 0 | 8 | 2705 | 448 | 8367 | 5996 | 573 | 54 | 113 | 0 | 0 |
| Texas | 0 | 30 [b] | 36 | 111 | 1 | 8 | 198 | 468 | 285 | 0 | 129 | 0 | 0 |
| Utah | 48044 | 44996 [b] | 60605 | 106105 | 64006 | 153335 | 115495 | 69886 | 75688 | 40817 | 44753 | 50452 | 39398 |
| Virginia | 0 | 54 [b] | 87 | 457 | 2460 | 2229 | 0 | 0 | 0 | 4243 | 3254 | 2997 | 2152 |
| Washington | 0 | 56 | 339 | 11 | 0 | 2814 | 576 | 840 | 2555 | 3802 | 10334 | 10340 | 7725 |
| Wisconsin | 0 | 2432 [b] | 3909 | 2632 | 3841 | 1877 | 1537 | 984 | 445 | 1776 | 532 | 1948 | 1165 |

a Based on 1936 data.

b Estimated by apportioning 1910 data based on total for group of states

TABLE C-9. CONTROLLED $SO_2$ EMISSIONS FROM LEAD SMELTERS 1900-1980 (1,000 tons)

| STATE | 1900 | 1905 | 1910 | 1915 | 1920 | 1925 | 1930 | 1935 | 1940 | 1945 | 1950 | 1955 | 1960 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| California[a] | 0.2 | 1.3 | 1.3 | 6.0 | 5.0 | 8.2 | 5.2 | 6.5 | 6.7 | 10.8 | 15.4 | 6.4 | 3.0 |
| Colorado | 24.4 | 16.0 | 11.5 | 9.6 | 5.3 | 9.4 | 6.6 | 2.2 | 3.4 | 5.1 | 8.0 | 4.7 | 5.4 |
| Idaho[b] | 25.4 | 29.5 | 32.8 | 47.8 | 34.9 | 38.5 | 40.1 | 27.4 | 31.9 | 21.5 | 32.8 | 22.2 | 15.1 |
| Illinois[c] | 0.0 | 0.0 | 1.3 | 1.1 | 2.3 | 1.0 | 3.1 | 2.2 | 0.9 | 1.5 | 1.0 | 1.9 | 1.4 |
| Kansas | 0.0 | 0.2 | 0.4 | 0.4 | 2.5 | 6.8 | 3.8 | 3.4 | 3.5 | 2.2 | 2.8 | 1.6 | 0.2 |
| Missouri | 0.0 | 29.9 | 48.1 | 58.2 | 51.2 | 62.9 | 59.4 | 32.9 | 51.2 | 52.5 | 48.1 | 37.3 | 33.3 |
| Montana[d] | 0.0 | 0.7 | 0.6 | 1.4 | 3.9 | 5.6 | 3.2 | 5.7 | 6.9 | 3.0 | 5.8 | 5.1 | 1.5 |
| New Jersey[e] | 0.0 | .0 | .0 | 0.1 | 0.7 | 0.7 | 0.0 | 0.0 | 1.3 | 1.5 | 1.4 | 1.2 | 1.0 |
| Oklahoma | 0.0 | 0.0 | 0.5 | 1.3 | 20.4 | 23.8 | 6.9 | 7.6 | 6.3 | 3.8 | 6.2 | 4.2 | 0.3 |
| Texas[f] | 0.0 | 0.4 | 0.6 | 0.7 | 0.3 | 1.0 | 3.1 | 2.1 | 1.2 | 2.3 | 1.3 | 1.0 | 0.6 |
| Utah | 14.3 | 13.4 | 16.0 | 31.6 | 19.0 | 45.6 | 34.4 | 20.0 | 22.5 | 12.1 | 13.3 | 15.0 | 11.7 |
| TOTAL EMISSIONS | 64.3 | 93.0 | 115.1 | 158.2 | 145.5 | 203.4 | 165.7 | 110.6 | 135.0 | 116.3 | 128.1 | 100.6 | 73.4 |

a Includes Arizona, Nevada, and Oregon
b Includes Washington
c Includes Wisconsin, Tennessee, and Kentucky
d Includes South Dakota
e Includes Virginia, New York, and North Carolina
f Includes New Mexico

| STATE | 1965[a] | 1970[b] | 1975[b] | 1978[b] | 1980[b] |
|---|---|---|---|---|---|
| California | 19.3 | 0.0 | 0.0 | 0.0 | 0.0 |
| Colorado | 34.7 | 0.0 | 0.0 | 0.0 | 0.0 |
| Idaho | 97.0 | 6.9 | 1.9 | 1.7 | 1.1 |
| Illinois | 9.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Kansas | 1.3 | 0.0 | 0.0 | 0.0 | 0.0 |
| Missouri | 213.9 | 152.3 | 40.0 | 37.3 | 24.3 |
| Montana | 9.6 | 103.6 | 27.7 | 25.4 | 16.5 |
| New Jersey | 6.4 | 0.0 | 0.0 | 0.0 | 0.0 |
| Oklahoma | 1.9 | 0.0 | 0.0 | 0.0 | 0.0 |
| Texas | 3.9 | 50.2 | 13.4 | 12.3 | 8.0 |
| Utah | 75.2 | 0.0 | 0.0 | 0.0 | 0.0 |
| TOTAL EMISSIONS | 472.2 | 313.1 | 83.8 | 76.6 | 49.9 |

a Based on 1960 emissions
b Based on references 83 and 86

# APPENDIX D

# WILDFIRE STATISTICS

## TABLE D-1. TOTAL AREA BURNED BY WILDFIRES (1,000 acres)[a]

| | YEAR | | | | | | |
|---|---|---|---|---|---|---|---|
| | 1925[b] | 1930 | 1935 | 1940 | 1945 | 1950 | 1955 |
| Alabama | 3398.6 | 1617.2 | 2127.1 | 894.3 | 710.8 | 420.4 | 209.8 |
| Arizona | 5.7 | 1.8 | 36.5 | 27.6 | 3.5 | 17.3 | 27.7 |
| Arkansas | 7900.0 | 4943.8 | 1465.1 | 1415.2 | 158.1 | 166.2 | 118.2 |
| California | 181.6 | 221.4 | 176.6 | 265.4 | 616.2 | 488.6 | 355.6 |
| Colorado | 1.3 | .8 | .3 | 1.4 | 16.4 | 29.4 | 6.3 |
| Connecticut | 20.7 | 55.9 | 7.3 | 8.2 | 3.1 | 2.0 | 2.2 |
| Delaware | 5.6 | 29.4 | .9 | 1.6 | .6 | .3 | .4 |
| D.C. | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| Florida | 2388.9 | 15957.2 | 15154.4 | 5938.6 | 6903.8 | 4818.4 | 3723.7 |
| Georgia | 2250.0 | 4605.2 | 2708.6 | 3225.4 | 612.7 | 2988.1 | 798.5 |
| Idaho | 56.4 | 24.1 | 52.1 | 49.2 | 134.7 | 25.5 | 13.8 |
| Illinois | 50.0 | 38.0 | 2.1 | 41.5 | 10.1 | 7.5 | 11.5 |
| Indiana | 20.6 | 200.0 | 10.4 | 48.5 | 11.1 | 4.0 | 3.0 |
| Iowa | -1.0 | -1.0 | -1.0 | -1.0 | -1.0 | 3.2 | .5 |
| Kansas | -1.0 | -1.0 | -1.0 | -1.0 | -1.0 | -1.0 | -1.0 |
| Kentucky | 69.4 | 756.0 | 18.7 | 528.1 | 259.4 | 265.3 | 287.7 |
| Louisiana | 609.2 | 1662.0 | 1259.0 | 635.4 | 626.2 | 433.4 | 112.3 |
| Maine | 3.6 | 33.6 | 18.7 | 8.2 | 5.0 | 18.0 | 1.8 |
| Maryland | 34.1 | 102.3 | 10.3 | 17.8 | 7.2 | 3.0 | 1.9 |
| Massachusetts | 21.2 | 73.0 | 25.3 | 16.9 | 9.4 | 10.0 | 9.2 |
| Michigan | 733.8 | 290.3 | 19.3 | 18.4 | 36.8 | 6.3 | 7.9 |
| Minnesota | 329.6 | 278.5 | 33.9 | 181.3 | 28.4 | 8.9 | 75.2 |
| Mississippi | 1741.9 | 1583.0 | 4173.4 | 4781.0 | 2459.6 | 1558.3 | 763.0 |
| Missouri | 578.6 | -1.0 | 6.8 | 150.0 | 615.2 | 581.5 | 275.7 |
| Montana | 68.2 | 15.6 | 36.6 | 80.9 | 47.9 | 1.2 | 6.1 |
| Nebraska | .8 | -1.0 | -1.0 | -1.0 | .6 | 1.0 | .1 |
| Nevada | .0 | .4 | 2.5 | 11.6 | 17.0 | 24.5 | 4.7 |
| New Hampshire | 8.6 | 19.6 | 2.7 | 2.0 | 1.1 | 6.1 | .7 |
| New Jersey | 70.0 | 270.7 | 66.4 | 17.5 | 10.8 | 12.0 | 21.5 |
| New Mexico | 27.5 | 1.9 | .6 | 1.9 | 11.0 | 109.9 | 1.5 |
| New York | 27.6 | 71.6 | 24.8 | 15.3 | 10.1 | 8.2 | 23.1 |
| North Carolina | 515.5 | 823.2 | 119.5 | 827.7 | 825.2 | 884.8 | 677.1 |
| North Dakota | -1.0 | -1.0 | -1.0 | 5.0 | 8.3 | .0 | 3.4 |
| Ohio | 19.7 | 30.7 | 18.6 | 18.8 | 6.8 | 15.8 | 2.9 |
| Oklahoma | 76.2 | 2243.1 | 548.4 | 3243.7 | 1510.7 | 1690.4 | 127.1 |
| Oregon | 70.8 | 61.7 | 80.8 | 43.6 | 228.2 | 25.2 | 81.9 |
| Pennsylvania | 128.0 | 310.4 | 71.3 | 33.8 | 26.5 | 36.8 | 33.8 |
| Rhode Island | 18.3 | 37.8 | 5.8 | 2.5 | 3.5 | 8.1 | .7 |
| South Carolina | 366.6 | 4995.7 | 519.0 | 1130.9 | 710.0 | 239.4 | 138.1 |
| South Dakota | .3 | .2 | 2.2 | 7.8 | 46.6 | 3.3 | .3 |
| Tennessee | 322.0 | 859.7 | 417.5 | 1332.8 | 527.8 | 523.6 | 73.1 |
| Texas | 619.7 | 1944.5 | 514.9 | 920.2 | 656.3 | 395.9 | 40.6 |
| Utah | .2 | 1.8 | 2.4 | 10.8 | -1.0 | 11.2 | 2.0 |
| Vermont | .2 | 7.1 | 1.7 | 3.7 | 1.2 | .9 | .2 |
| Virginia | 217.9 | 935.6 | 68.5 | 86.5 | 31.3 | 20.7 | 17.6 |
| Washington | 177.4 | 217.9 | 160.6 | 61.0 | 60.1 | 7.5 | 1.5 |
| West Virginia | 62.7 | 359.7 | 29.7 | 83.5 | 48.7 | 61.7 | 28.6 |
| Wisconsin | 355.6 | 527.4 | 1.9 | 13.5 | 12.7 | 2.5 | 3.8 |
| Wyoming | .3 | 1.7 | 18.2 | 37.1 | 1.7 | .3 | 5.5 |

TABLE D-1. TOTAL AREA BURNED BY WILDFIRES (1,000 acres)[a] (continued)

| | YEAR | | | | | |
|---|---|---|---|---|---|---|
| | 1960 | 1965 | 1970 | 1975 | 1978 | 1980 |
| Alabama | 117.0 | 91.6 | 140.7 | 42.9 | 346.9 | 123.2 |
| Arizona | 37.2 | 20.5 | 37.6 | 50.1 | 29.7 | 220.5 |
| Arkansas | 298.9 | 78.7 | 128.2 | 42.1 | 68.2 | 159.9 |
| California | 311.0 | 115.8 | 436.5 | 213.3 | 183.5 | 379.4 |
| Colorado | 14.5 | 1.3 | 9.6 | 13.3 | 21.3 | 34.0 |
| Connecticut | 1.3 | 2.2 | 1.3 | 2.7 | 2.5 | 1.8 |
| Delaware | .2 | .2 | .1 | .1 | .0 | .2 |
| D.C. | .0 | .0 | .0 | .0 | .0 | .0 |
| Florida | 1261.3 | 329.8 | 84.0 | 296.3 | 89.7 | 161.4 |
| Georgia | 162.9 | 38.4 | 60.0 | 26.2 | 70.4 | 98.8 |
| Idaho | 149.9 | 27.4 | 53.3 | 70.2 | 26.6 | 118.2 |
| Illinois | 6.0 | 11.4 | 7.6 | 1.3 | .6 | 6.5 |
| Indiana | 9.7 | 4.8 | 4.2 | .5 | .8 | 1.6 |
| Iowa | .0 | .7 | 8.5 | 2.4 | 3.2 | 21.6 |
| Kansas | -1.0 | 50.8 | 35.2 | 21.7 | 82.9 | 109.0 |
| Kentucky | 155.1 | 68.8 | 53.9 | 19.5 | 39.9 | 366.0 |
| Louisiana | 125.3 | 108.1 | 83.9 | 45.8 | 96.9 | 91.0 |
| Maine | 2.8 | 16.5 | 1.0 | 2.0 | 3.2 | 2.3 |
| Maryland | 1.8 | 1.9 | 1.2 | 1.7 | 1.4 | 16.3 |
| Massachusetts | 5.1 | 16.6 | 6.8 | 8.5 | 8.9 | 11.2 |
| Michigan | 3.4 | 3.4 | 6.9 | 17.6 | 2.9 | 33.4 |
| Minnesota | 159.8 | 43.3 | 25.8 | 56.5 | 16.2 | 185.7 |
| Mississippi | 174.9 | 70.5 | 113.8 | 53.4 | 130.0 | 105.0 |
| Missouri | 358.7 | 398.6 | 85.0 | 81.6 | 38.8 | 90.3 |
| Montana | 37.6 | 2.2 | 24.9 | 4.7 | 3.9 | 42.6 |
| Nebraska | 21.1 | 167.9 | 36.0 | 53.9 | 23.3 | 51.6 |
| Nevada | 7.1 | 13.7 | 6.7 | 34.3 | 13.3 | 83.6 |
| New Hampshire | .2 | 1.8 | .3 | .4 | .6 | .6 |
| New Jersey | 20.4 | 16.5 | 3.5 | 5.0 | 5.2 | 10.9 |
| New Mexico | 22.6 | 7.0 | 28.1 | 8.1 | 22.3 | 20.5 |
| New York | 5.1 | 8.5 | 2.3 | 3.0 | 27.2 | 5.6 |
| North Carolina | 83.1 | 75.3 | 81.7 | 18.3 | 81.7 | 50.8 |
| North Dakota | 6.3 | .4 | 2.4 | 1.5 | 11.7 | 15.7 |
| Ohio | 5.8 | 4.5 | 5.0 | 2.1 | 5.0 | 2.4 |
| Oklahoma | 295.9 | 582.9 | 94.2 | 209.5 | 245.3 | 87.8 |
| Oregon | 84.1 | 15.9 | 84.4 | 12.8 | 15.4 | 57.2 |
| Pennsylvania | 33.3 | 12.8 | 4.5 | 5.8 | 5.2 | 8.7 |
| Rhode Island | .9 | 1.3 | 1.1 | .9 | .7 | 9.8 |
| South Carolina | 44.6 | 41.4 | 64.8 | 12.6 | 44.7 | .7 |
| South Dakota | 21.2 | 3.0 | 24.5 | 36.9 | 53.1 | 24.7 |
| Tennessee | 49.5 | 28.0 | 35.8 | 22.0 | 46.2 | 62.2 |
| Texas | 124.6 | 23.7 | 20.4 | 16.4 | 1977.4 | 46.6 |
| Utah | 18.0 | 4.8 | 7.5 | 60.6 | 12.3 | 27.8 |
| Vermont | .2 | .6 | .1 | .7 | .2 | .8 |
| Virginia | 7.8 | 16.3 | 11.8 | 8.9 | 12.3 | 6.8 |
| Washington | 45.2 | 3.6 | 226.1 | 7.6 | 7.8 | 4.3 |
| West Virginia | 59.5 | 101.6 | 30.8 | 14.5 | 32.0 | 86.9 |
| Wisconsin | 73.3 | 4.8 | 10.8 | 6.5 | 3.5 | 26.7 |
| Wyoming | 10.6 | 1.0 | 19.8 | 21.3 | 9.2 | 17.4 |

FOOTNOTES TO TABLE D-1 (concluded)

Note: -1 indicates State was not a participant in the cooperative fire program.

[a] State and private lands protected and unprotected.

[b] 1925 data were used for earlier years 1900-1920.